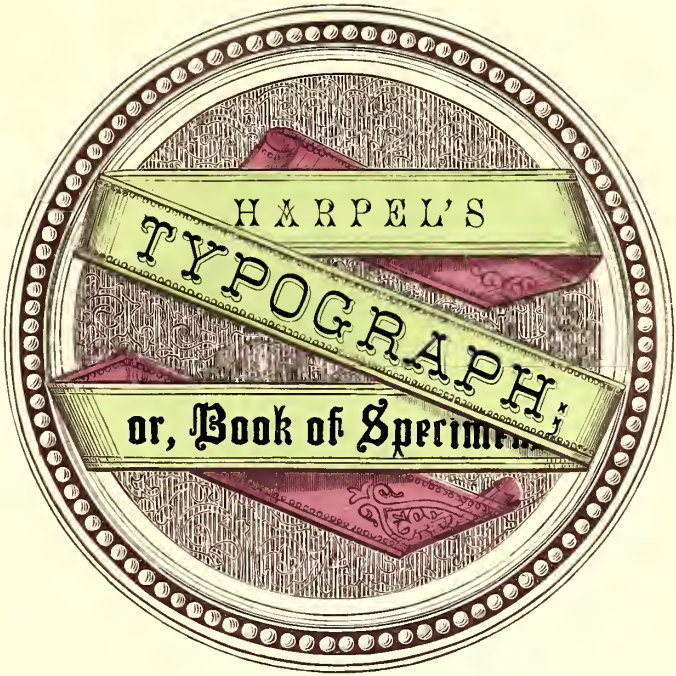

C. H. FAIRBANKS,
Practical Typographist.


HARPEL'S
TYPOGRAPH,
or, Book of Specimens

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Typographic Arms of Germany.

DRAWN AND ENGRAVED EXPRESSLY FOR HARPEL'S TYPOGRAPH, BY B. B. CHAMBERLIN, CINCINNATI.

HARPEL'S

TYPOGRAPH

— OR —

BOOK of SPECIMENS

CONTAINING

USEFUL INFORMATION, SUGGESTIONS

AND A COLLECTION OF

Examples of Letterpress Job Printing

ARRANGED FOR THE ASSISTANCE OF

Master Printers, Amateurs, Apprentices, and Others,

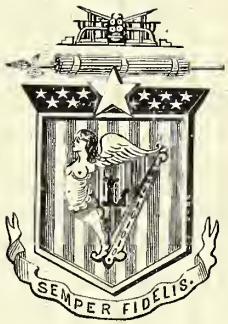
BY OSCAR H. HARPEL

Typographic Designer and Printer

CINCINNATI

PRINTED AND PUBLISHED BY THE AUTHOR

1870



ENTERED ACCORDING TO ACT OF CONGRESS, IN THE YEAR 1870, BY

OSCAR H. HARPEL,

IN THE CLERK'S OFFICE OF THE DISTRICT COURT OF THE UNITED STATES, FOR THE SOUTHERN DISTRICT OF OHIO.

Prefatory Remarks.

The abundant supply of excellent and beautiful typographic appliances of every description now presented to the choice of the Printer, and the cultivated tastes and often exacting caprices of his patrons, render it not only comparatively easy but very necessary for him to attain to excellence in workmanship. If he would reap the rewards of profit and honor, he must be prepared to meet the varied demands of popular patronage with intelligence, taste, and skill, as well as be constantly alert to the best practical effects, if not the extreme possibilities, of his craft.

It cannot be denied that refined taste and elegance in his productions give the printer a hold upon public consideration and support that the most laborious and obliging incapacity—with even better advantages in other respects—would fail to retain for any considerable period. It is from lack of ability or carelessness in arrangement that bungling workmen are compelled to accept the offal of patronage, while the good craftsman culls the best of it, and distances his weaker rival in the advance to financial success. For this reason, if for no other, all engaged in the business of printing should take advantage of every avenue leading to better information and practice in its accomplishment, if they would reach the higher results of this progressive art.

The need of a more practical hand-book and guide, than any at present available, for the use of novices and unskilled workmen, has led the publisher to issue this volume, in the belief that it will measurably fill the want and afford such learners real assistance. While this is the main intention of the publication, it will, however, aim to be of service to accomplished adepts and managers of printing concerns,—who hold the position of teachers,—by relieving them, to some extent, of the annoyances and vexations so frequently attending verbal instruction or practical demonstration, where there is no convenient means of reference at hand to illustrate an idea desirable to be impressed upon the learner's mind.

Under the captions:—*Hints About Starting an Office; On Letterpress Composition; The Press Room; General Business Management;* and *Closing Notes;*—will be found such information and suggestions as are deemed pertinent to the objects in view.

The various specimens herein displayed have been taken, except in obvious instances, from the current transactions of a regular printing office, and were not especially designed for the pages of the book. These specimens are presented in the order of their occurrence, the necessity to use the material in the type forms—from which they were almost entirely printed—preventing the possibility of systematic arrangement. A convenient *Index* will be found at the end of the book.

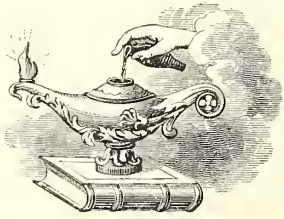
The presswork on nearly all of the pages was done in ordinary course, by average workmen, and is not offered for *critical* judgment, further than it applies to general practical execution, such as may be accomplished on job presses now in vogue. Quarto and half-medium bed-and-platen presses were used throughout the main body of the work.

Elsewhere will be found references to, and explanatory of, such matters as are deemed worthy of particular mention. Nothing, however, is sought to be made an arbitrary guide. The first part of the Book is condensed from the writer's experience of many years, and the samples of design are submitted as a varied collection of respectable work, that may help to remove some of the embarrassments usually experienced by learners and teachers.

The expense of the TYPOGRAPH has been greater than was at first anticipated, in consequence of considerable additions to the original plan. Consequently the prospect of a future edition of the work, except at an advanced price, is very doubtful.

Cordial acknowledgements are due to those friends of the undertaking who have spoken words of encouragement from the start, as well as given more tangible evidences of their desire to assist it. Without particularizing, in this place, any who have extended to it a helping hand, the publisher offers his sincere thanks to each and all, hoping that the deficiencies of a first book will meet with leniency at the hands of those who may see proper to judge its merits.

In conclusion, the desire is earnestly expressed that the TYPOGRAPH may aid to inaugurate a better understanding of the tasteful utility as well as artistic scope of typography in the present day. It is hoped, moreover, that a kindly disposition of emulation, communication, and comparison, will spread among the junior and senior members of the honorable craft. Such a spirit, if properly maintained, can only promote the interests of all concerned, and serve to elevate Printing still higher as a substantial, creative, and preservative Art.



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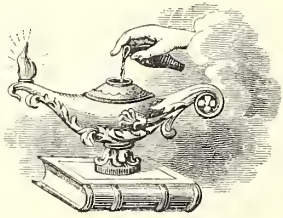
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(No. 1.) BO-PEEP!

Engraving furnished by kindness of Francis Hart & Co, General Printers, 63 Cortlandt Street, New York.

Hints About Starting an Office.

Young printers, as well as other people, when going into business on their own account for the first time, frequently assume that if they have a good outfit, plenty of assurance, and announce themselves in strong terms, patronage and income will follow as matters of course. But a majority eventually arrive at wiser conclusions, and learn from later experience that numerous other essentials are required to bring about success. A few advisory notes concerning these matters are therefore not considered out of place in this volume.

In commencing the establishment of a new interest, if any one would have it become profitable and popular, he should possess strong common sense, economy, personal energy, and a dispositon to please. If he have little or no experience in general management, and steps, as it were, from the position of workman to that of employer, he can not exercise too much prudence in arranging his plans for future procedure. No matter how familiar he may deem himself with ordinary business routine, or the uses of the various implements and articles that comprise a complete printing establishment, when he comes to be master, and has to choose, determine, and deal for himself, the chances are that he will often fall into errors and admit disadvantages that older managers have learned to avoid.

Every one about to enter the printing business, will do well to make a careful survey of the proposed field he would occupy. The amount and character of average current patronage should be fairly estimated, and, as far as possible, the ability, facilities, and dispositions of competitors ascertained, with a view to marking out the course of action to be taken—leaping at no hasty conclusions as to one's own personal superiority, nor expecting to become established through dishonorable practices, underbidding, and the like. Make "Live and Let Live" an abiding rule, and if this can not be sustained, seek for an opening in a more promising quarter.

Supposing, however, the inquiries in regard to the place of operation shall have proved satisfactory, the next step will be to secure a location that is convenient of access to neighboring and transient patronage; not too expensive; but well ventilated, and with plenty of light from without. Dingy, obscure rooms are generally adverse to prosperity, and certainly disagreeable to most patrons and workmen.

The tendency of the inexperienced purchaser of printing material for a new office, is usually toward injudicious and superfluous outfit. With a

limited capital at command, the desire is generally felt to expend it to the best advantage; but, from one cause or another, the intention is often defeated—probably, in most cases, through haste or want of reflection. Real present requirements are not sufficiently calculated, nor future contingencies considered, and so the beginner becomes encumbered with things not needed until a later period, if at all, while the necessity to have matters of immediate utility, which were overlooked while available means lasted, compels him to ask for credit in obtaining the deficiency.

Mere predilections, theories, and experiments, unless sanctioned by actual and satisfactory tests, should be entertained with much precaution at the outstart. Carrying out speculative projects and solving doubtful enigmas have crippled many who might have been prosperous enough had they pursued the beaten path that was sure and distinct.

It is beneficial to observe local traits, tastes, and requirements in regard to printed matter, and, especially in large communities, the methods of operation adopted by prosperous and well-managed concerns, whereby to correct and modify one's own preconceived notions of business transaction. But, be not deceived, while witnessing the busy performance and evident good fortune of well-patronized establishments, into the belief that there is no end of patronage to be had, provided one can have sufficient material and an office under one's control wherein to become rich! Ah, how often do such thoughts deceive! A confident feeling of capability and a supply of approved facilities for the execution of work, are excellent things to begin with; yet an enduring business can be built up only on a sure foundation, little by little, and must involve fixed principles of industry, fair dealing, painstaking, and close and systematic attention to expenditure and income, whatever natural advantages may surround it besides. Negligence and bad policy will overthrow the best conceived enterprise.

Whether the work to be undertaken consist of newspaper, book, or job printing, or a combination of branches, nothing should be purchased at the start that is not absolutely necessary to its moderate execution. Additions may always be made as required, but articles got for possible or prospective utility, are, in nine cases out of ten, not only dead capital but greater or lesser annoyances. What is selected, however, should be the BEST. Thorough examination of previously prepared memoranda should be made, to ascertain if anything has been put down that should not be, or if indispensable things have not been omitted. To buy old, worn, and delapidated machinery, type, etc. is a bad investment, no matter how small the price paid for them.

An office should be purchased with direct regard to the capital at command, wherewith to pay for it immediately, and without dependence upon possible trade or assistance, that may arrive too late. Embarrassment arising from indebtedness, as well as inferior capability, has caused much of the unfair and suicidal competition, and consequent depression of the printing business, in many places. Be content with a small office out of debt, rather than a large one that is encumbered.

We would recommend plain, neat, and substantial **Furniture**—such as cabinets, racks, imposing stones, tables, closets, standing galleys, banques, etc.—uniform in appearance, but made for use rather than show. For **Case Stands,** desired without racks, the lately invented, neat, strong **Iron Bracket Stands** are to be preferred, as they do not warp or get out of order like wooden ones, and permit the free passage of air besides.

Racks for Job Letters ought to be strongly and compactly built. The cases should be about five-eighths to three-quarters of an inch apart, and rest on strong, hard wood cleats well fastened to their places by screws, or slotted into the legs or ends of the stand, and have stout back stops to permit the cases, when pushed back, to be on a line in front. A rack will contain from four to eight more cases, if constructed in this way, than it would if made by the common method, with wide spaces between cases; and the cleats or rests carelessly nailed on, and liable to give way under heavy founts. The usual surplus space of six or more inches found in racks meant to serve also as stands,—which we do not approve, however,—is best if left in front, as it will thereby afford room for a case to be used in the rack, when only partially pulled out, at times when single lines are to be set up for jobs and display pages. Where this plan is adopted, the intervals between the cleats should be closed in nearly even with the ends of the case, so as to prevent it from slipping out sideways.

Cabinets, Racks, Drawers, and other pieces of office furniture apt to become heavy when filled with material, if raised three or four inches above the floor, by means of blocks, will enable them to be examined underneath for dropped letters or dirt that could not otherwise be got at.

Cases, whether for book or job work, should be made of the best kinds of well-seasoned wood, that is not liable to split or warp. The bottoms should be smoothly covered with tough cartridge paper, or such as is not easily affected by dampness. Those cases that have the angles of the boxes wired down firmly with fine copper wire at various points, are stiffer and more durable than those without such wires. The ledges of cases should be made with square angles, not rounded, as some are.

Closets for Standing Jobs, Alive Matter, or anything in type that it is desirable to preserve free from picking, dust, and pi, should have close-fitting doors. Such closets ought always to be placed in charge of a responsible person, who will examine them weekly to see if there is an undue accumulation of matter that should be distributed.

Cabinet Drawers, for any purpose, should have strong **Iron Handles,** firmly screwed on, instead of the light fancy or porcelain knobs, that are liable to get broken and pull out.

Strong Boxes,—or, better still, **Drawers** that cannot be removed,—for surplus quadrates, should also have good **Iron Handles,** as indeed should all receptacles that are to hold heavy articles.

A Compact Cabinet for Cuts, with suitable strips for separating the different sizes, is a much better way to keep them uninjured than the common practice of piling them up in odd corners, or on shelves, making it necessary to overhaul them frequently to get at some needed one, and

causing more or less injury to their faces, each time, from unnecessary handling.

In all **Carpentry** done for an office, neatness and comfort should be considered. Have no tight-fitting cases, creaking drawers, ill-made closets, rough, projecting corners, rickety joints, or haphazard construction of any kind, no matter how plain or simple the work may be in other respects.

Types, Borders, Ornaments, Rules, etc. ought to be judiciously selected with a view to harmonious effect in any kind of work for which they may be employed. Styles should be varied systematically, and a due proportion of the various sizes of romans, italics, texts, gothics, antiques, bold and light faces, scripts, hairlines, ornamented, etc., maintained, whether with ordinary, condensed, or extended bodies, so as to insure elegance of combination, as well as sufficient variety, according to the tastes of different patrons. A large, incongruous collection of type, bought without regard to its harmony or application, simply because it is new, or strikes the passing fancy, or is the same as that contained in other offices, will seldom be found as useful for general purposes as a smaller quantity selected with direct reference to its future employment and tasteful adaptability.

The introduction of many-characters and elaborate **Combination Borders** causes a great waste of time in printing offices, that is rarely paid for by the work on which it is usually employed. Some are very beautiful when carefully worked, but wear out quickly, and should not be indulged in to any great extent where expedition and moderate prices are demanded. It were better, we think, if founders, who seem to vie with each other in producing such things as rapidly as possible, would furnish any of the various combinations such borders are capable of forming, electrotyped and mortised, as they are needed by the printer.

In **Job Letters** we would recommend purchasing all the series of a really desirable face or none of them.

The rivalry of type-makers, at times, is apt to cause the production of so-called **Novelties** that are of an indifferent character. Although *new*, they have often nothing to commend them besides oddity or incompleteness of design—are generally evanescent as to utility, and seldom profitable to persons unwary enough to expend money for them. When such things appear, they should be persistently refused, which would soon make them scarce. Almost every printing establishment of long standing, that does much mixed work, has a number of founts of type, ornaments, etc. that have been discarded as unpopular, difficult to work clearly, or are clumsy, and otherwise nearly useless, although but little worn; while others, that were elegant and attractive at first, have never ceased to be in request. One often wonders, in glancing over samples of past work, how such and such styles of type could ever have been thought handsome or appropriate, or even admitted among the adjuncts of an office at all. If it is true that

"A thing of beauty is a joy forever,"

then it is proper to deliberate somewhat before ordering any and every-

thing that appears, simply because it may please the fancy momentarily, but which will not prove useful enough to pay for its cost. Let us have fewer of these unprofitable temptations say we.

Uniformity of Body in the various founts of letters used in an office having the same names—such as long primer, pica, great primer, etc.—should be maintained as nearly as possible. It is a bad thing to have two or three bodies of pica, for example, that vary enough to affect the appearance of work when the quadrates and spaces are used indiscriminately. The lack of a proper understanding among founders of different sections in this particular, has rendered the possession of type made by all of them, rather a drawback than an advantage.

Every Case in a printing office should be neatly and distinctly **Labeled** with a line or two of the type it contains, set up for that purpose, and accompanied with its foundry name. Tough, well-calendered paper, either white or light yellow, if used for such labels, will last a long time.

In arranging letters in cases, care should be taken that those of approximate sizes placed near to each other shall have their **Nicks** so different that there will be no liability of one being taken for another in correcting or distributing.

Labor-Saving Rules, accurately cut to ems of pica, and **Brass Leaders** to line with the various bodies of Scripts and Italics, are costly, but, we think, amply repay their cost in convenience and saving of time. In very particular work, however, we prefer single lengths of rule, as it is not always possible to join pieces so as to prevent the point of their coming together from being noticed, especially on card and tabular work.

Leads and Slugs made to various type bodies should be plentifully supplied to an office. If they are cut to various lengths of ems and ens of pica, as is now pretty generally the case, they render the waste of time and metal, in chipping them at the cutting bench—an abominable practice—inexcusable.

Metal Furniture and Quotations, cast in accurate moulds, are always desirable, and save much labor and many quadrates in doing blank work, imposing forms, etc.

Where **Economy in Case Room** is requisite, instead of the bad custom of putting two small founts of different faces together, it is better to use large upper cases, and divide the boxes diagonally by means of high (stereotypers') leads, four to pica in thickness. These leads should be fitted tightly to prevent them from lifting when the case is moved about or jolted suddenly, thereby letting the contents of different compartments get mixed.

A convenient size for **Imposing Stones** is about three feet three inches by five feet three inches. They should be elevated about three feet four or five inches above the floor. The slab or stone should be hard, close grained, elastic, not apt to chip, smoothly polished, and perfectly level on the working surface. White Italian marble, and some kinds of slate, make good stones. Have them from one and three-quarters to two and one-half inches thick, and laid in a bed of sawdust or gypsum, to prevent springing

or cracking at the weaker parts. The box that is to contain the sawdust or other bedding should be made with tightly matched lumber, and about three-quarters of an inch deeper than the thickness of the stone. An imposing stone well set up, will be firm, and so level as to allow single lines of letters to stand on their feet anywhere upon its surface. **Iron Imposing Tables** we do not consider good, on account of their tendency to rust and wear the bottoms of type faster than stone.

The **Frame of the Stone** should be strongly constructed of well-seasoned and rather hard wood. Drawers for lock-up furniture, mallets, planers, shooting-sticks, quoins, etc. should not come out square to the sides and ends, lower than a couple of feet above the floor, as below that there should be leg-room for persons working at the stone for any extended period, as in imposing, correcting, etc. If the drawers are inserted lengthwise, or into the narrow ends of the stone frame, there will be plenty of room for a **Chase Hole** eighteen inches wide, at the centre. (See diagram in another part of the book.)

The best **Composing Sticks** are made of steel, and are smoothly polished, as well as strong, light, perfectly true from top to bottom, and without any "give" or spring at the slide. We have examined a very excellent kind made with a brace firmly secured to, and extending from, the top of the sliding bar to the bottom part of the stick, where it fits squarely, yet is so contrived as to be entirely out of the way of the hand, and adds but little to the weight to be sustained while composing. Few of the ordinary sticks, adjusted by means of a common clasp, are to be depended upon for particular work when they are worn in any degree, and seldom hold as firmly as the nut and screw; although the latter is by no means the most convenient form of fastening. Those secured, when set to a measure, by means of a groove and lever arrangement, we consider good.

An obvious fault that exists in most of the composing sticks used in this country, is, that they are too deep from top to bottom by one to two ems of pica. The longer ones, when made of metal, are tiresome and unwieldy while being filled with solid matter. Although the workman may empty them before they are full, if he wishes, yet it would be better, we think, if they were made less deep when more than eight inches in length. Procure close-grained **Mahogany Composing Sticks** for long measures.

A simple but well-constructed **Mitreing Machine**, that will cut rules and leads perfectly true to any required angle, is certainly a necessity to every employer who wishes to do exact work, as well as to economize in the time consumed therein.

The old-fashioned **Wood Quoins**, although rather rude when compared with some excellent mechanical ones that have been introduced recently, must still be used for a long time in many places. They should be made of dog-, live-oak-, box-, or iron-wood, and have their beveled sides to correspond exactly to the furniture with which they are to lock up. For very narrow lock-ups, **Iron Side and Foot Sticks** are decidedly better

than wooden ones, as they will not yield so readily when the quoins are driven entirely home.

Wood Furniture is convenient to close in and lighten forms that are to be locked up for ordinary presswork requiring no register; but if the latter is necessary, it should not be used to any extent, as it will swell when wet. **Metal Furniture** is always best for exact registers. For poster or other common work requiring a great deal of wood furniture, it is advisable to have the whole of it, including reglets and side-sticks, cut to ems of pica, and marked with figures struck into the squared ends to indicate the length and width of each piece.

Shooting Sticks made of polished wrought steel, if properly shaped, are the best, but require careful handling to prevent damage to type and imposing stone.

Choose **Mallets** of medium weight turned from lignum-vitæ or iron-wood, and see that the handles are thoroughly secured.

Planers made of compact mahogany-wood and perfectly true are to be preferred. They should be capped with a strip of stout calf-skin or kip, to lessen the vibration of the strokes when forms are planed down.

In choosing **Printing Presses** and other **Office Machinery,** have only the most efficient and best made kinds, if possible. These will be found to be the cheapest in the end, if nice work and durability are desired from them, although the prices paid for them may be greater than for inferior articles. Beware of troublesome complications that require experts to handle. Simplicity of construction and action, combined with strength, are most necessary. Remember the machines will necessarily be managed, more or less, by partially skilled workmen and learners. Scientific invention and modern improvement has supplied much machinery that is almost perfect in its operation, but there still remains considerable that is little better than worthless, which should never be admitted into a well regulated office, however plausibly those concerned in its sale may speak of it. Prudent inquiry among *disinterested* and experienced practical men will indicate what to avoid in this respect.

Every pressroom should be provided with a well-built **Roller Closet** as nearly air tight as possible. Rollers are among the most expensive perishable articles of a printing office, and if carelessly attended to they become doubly so. They should be arranged systematically and separately, according to size, in such a closet, especially in cold weather. Shallow tin pans, to be filled with warm water in dry or cool seasons, should be placed at the bottoms of closets, to allow the rollers to attract moisture, which will preserve them in good working condition longer than they would otherwise be kept.

Have **Ley Brushes** made of real bristles that are firm yet elastic, and without rough or irregular rubbing surfaces. Much small type is injured by inattention to this item. Try a brush by rubbing it briskly over the palm of the hand for a few moments, and if it has a searching, springy feel, yet produces no harsh or scratchy sensation, it will be a good brush.

An **Ink Table,** eighteen inches square at top, and three feet high, with stout legs spreading from the perpendicular two or three inches at the bottom, and furnished with one or two drawers for holding tympan paper, odd tools, and the like, belongs properly to each press where fountains are not used, and colors are frequently changed.

Ink Stones of smoothly finished slate or marble, whereon to mix, grind, or bray out inks for immediate use, are better and cleaner than the iron tables attached to small presses, which are not good for delicate colors.

A **Muller** of marble that will not easily splinter, or of the best flint glass, is useful for rubbing up old inks that have lost some of their cohesiveness, elasticity, or "life." In fact, if the Muller were more generally used, inks that are sometimes condemned as worthless, would be found very good, after being well rubbed in cold weather by its means; and a rubbing up of most ordinary black or colored inks, without unduly heating them, improves their working qualities and brilliancy very perceptibly at all times.

Ley Pots should be made of iron and not too large; because if too much ley is made, it is apt to become dirty, and fill up, rather than clean, type.

Baskets or Bins, for the reception of waste and spoilt paper, will prevent the slovenly appearance visible in many press-rooms, where the floors and tables are allowed to be littered about.

A good **Drying Rack,** for laying out sheets that are liable to set off or have been worked damp, is a very useful piece of furniture. For job offices, those made about twelve feet long, eight feet high, and sixteen inches deep, with six standards well braced together at top and bottom, and supplied with shelves ten or twelve inches apart, the bottoms of which are made of flat, smooth slats, separated a few inches from each other to permit the circulation of air, will be found most convenient, as they can be placed along walls, and occupy less useful room than if made square.

Another useful article, and one that should always be had, if possible, is a small, solid **Bench,** supplied with a vise, saw, files, chisels, plane, hammer, and a few other tools. Many a dollar can be saved by having such a bench and tools, to do small jobs of repairing that must otherwise be sent away to be done.

Order, Convenience, and **Simplicity** in arranging a working place ought to be carefully observed. A crowded, helter-skelter condition of things makes daily labor irritating and uncomfortable; while ease in getting at and using any implement or material, expedites its execution, and consequently increases the profits of an office.

There are numerous other suggestions that might be made relative to organizing an office, but what has been said will suffice. A little forethought and care will indicate such additional items to those who have the well-being of their establishments at heart.



(No 2.) NAPOLEON AFTER WATERLOO.

On Letterpress Composition.

Composition, or the nice arrangement and adjustment of type implements into various forms, has been described as the more *intellectual* portion of typographic handicraft, and the pressman's work as the *mechanical* means whereby the former becomes really utilized, and the result termed printing is reached. Each operation, however, is dependent upon the other for its full accomplishment, and an intelligent understanding and co-operation between compositor and pressman is essential to produce in the best manner what is required at their hands. Thoughtful discrimination and painstaking labor is necessary in both branches. Although superior manipulation in either may serve to conceal the defects of the other, in some degree, yet it is the true policy to have both as excellent as possible under all circumstances.

While there is positive evidence that type composition, in its technical as well as artistic application, is continually improving in most portions of the country, there still remains to be regretted that which is defective and unseemly in many important particulars. The absence of ambition, and nearly total disregard evinced by certain so-called printers for the "fitness of things," in many cases, is too often occasioned by ignorance, lack of taste, skill, or the want of an adequate incentive to better performance on the part of such printers; and a destructive, short-sighted indifference to good execution on that of their customers, so long as the latter can have done what they foolishly suppose will answer every purpose, at a merely nominal price for the service.

The tendency to degrade and cheapen this the best aid to every commercial, social, artistic, and scientific accomplishment, has retarded its full progress, and it certainly indicates a want of proper appreciation of the typographic art wherever such practices rule. We are sorry to say, also, that such pseudo-printers assist in extending evils that are becoming daily more injurious to themselves as well as better men.

First Things to Learn.

The first step of a learner should be to acquire the *names*, and understand, to some extent, the difference between the various implements and materials with which he will be surrounded. He should know what is roman, italic, antique, gothic, text, script, ornamental, or other "faces" of letters; what constitutes a full fount of book letter, and what a fount of job letter; what are kerns, shoulders, shanks, and nicks of type; what are rules, dashes, leads, slugs, leaders, quotations, and metal, wood, and other form furniture. He should be shown the construction of, and variations in, different kinds of type cases, and how the boxes ought to

be occupied; what are stands, racks, cabinets, sticks, galleys, chases, bodkins, mallets, planers, quoins, imposing stones, and other accessories of an office with which he is at all likely to be brought in contact; thus making him familiar with their technical names and uses even before being permitted to have full control of, or access to, them.

A week's time thus consumed by an earnest and intelligent novice will give him a large amount of theoretical insight that will hasten his progress when it is put into actual practice; and he will be better prepared to respond to familiar technical directions relating to the articles about him, which at least indirectly form a part of his business, and are to be always identified with his future operations in it.

HOW TO LAY A CASE WITH NEW LETTER.

Carefully remove the paper from around the type as it comes from the founder, and stand the page confined by its cord on the imposing stone. Wet it with a weak mixture of soap and water, which will prevent the letters from clinging together when first used. Next deposit it upon a small square brass galley—one made especially for casing letter if at hand—evenly and squarely, with the nicks of the type up, and cautiously untie the string so as to make no pi. Then proceed with a smooth, stout rule of sufficient length to take up three or more lines of letters or "sorts" of the same kind; and holding them horizontally, with the nicks still uppermost and faces toward you, slide them gently from left to right into the proper box, taking care that the faces do not strike perpendicularly or scrape against the sides of the box. Repeat this until the box is *comfortably* full, and never shake or shove letters together to make room for more in a box.

Extra sorts should be placed in regular lines as they occur, upon a separate galley, to be tied up, papered, marked, and cared for until the boxes are to be replenished, or another pair of cases laid. Bundling up surplus sorts into papers is an excellent mode of impairing the fine lines of the letters—say ten per cent.

CASTING OFF COPY.

This requires exact calculation and considerable judgment. It cannot be done well in haste. If the "copy" for the work to be set up is in manuscript, and regularly written on sheets of paper uniform in size, the task will be comparatively easy; but, if, on the other hand, as is often the fact, the copy is slovenly and irregularly written on paper varying in size, with numerous erasures, interlines, compressed notes, abbreviations, and the like, it is a matter of some difficulty to arrive at complete accuracy: yet comprehensive examination, patience, and care, will ascertain with tolerable precision what the compositor has to do, however unattractive and irksome the duty in such troublesome instances may be.

From among several methods in vogue, we present as a good one that of first resolving the written matter into an average number of words to a

page, not counting chapter lines, sub-heads, poetical extracts, breaks, and like contingencies, which should, however, be subjected to a separate calculation, and added to the cast-off last.

A tolerably close estimate of the words contained in even bad manuscript may be made by counting the *lines* of say twelve of its varying pages, then getting an average per line of the *words* in several lines taken from each page, and multiplying the number of the former by that of the latter. Next add the average allowance for chapter lines, sub-heads, and other than break lines, counting them as full lines. Reduce the break lines to full lines, adding them to the whole, and you have the contents of twelve pages. Divide by twelve to find the contents of a single (average) page.

Example:—A work of 400 pages in manuscript is submitted. 12 average pages, taken at intervals, give an average of 30 lines to a folio. 3 lines taken at various places from each of these 12 pages indicate an average of 11 words to a line. This will give about 330 words to a page, exclusive of breaks, chapter, and other lines, for which an allowance is made of four lines, or 44 words, for each page of manuscript, which, added to 330, makes 374. Multiply the 374 words per page by the 400 pages in the manuscript, and you have a result of 149,600 words in all.

To know how many pages of printed matter this will make, it is now necessary to have the size of type and page to be used. An exact printed page, containing the one and representing the other, is always a good guide in completing the calculation, which is done by dividing the number of words contained in the manuscript by that of the printed page. This will give the desired cast-off for the work in printed pages. Thus, the estimate of the manuscript gives 149,600 words; that of the printed page, of the size required,—set up in leaded long-primer, we will say, for example,—gives 480 words; consequently, 149,600 divided by 480 gives 312 pages, or 20 signatures, if printed in octavo.

When extra, or more than single, "leading" of matter is required, count the extra leads (six-to-pica being the size most used in book composition) in the following proportions: three for a nonpareil line; four for brevier and bourgeois; five for long-primer and small-pica; six for pica; and so on, increasing or diminishing in the necessary ratio for larger or lesser sizes.

For works under 144 pages, the cast-off of which does not reach a number of folios divisible by 4, there should be *added* the number that will make it so. Thus, 110 will be counted as 112; 133 as 136; and so on. A sufficient allowance of pages, added in the same way, should be made in cast-offs for larger works, adopting 8 or 12 as the even dividing number. This rule applies more particularly to works where the copy is *very* irregular or much crowded with abbreviations and closely written notes, alterations, interlines, etc.

Another method of casting off copy, is to set, from various parts of the manuscript, a stickful or more of the type chosen, to the measure of the page decided upon, and ascertain, from the consumption of lines of writing by those of type, what the compositor's work must be. This will do very

well in short works, or with carefully prepared manuscript; but, for close approximations, the plan first given will be found more reliable.

COPY THAT SHOULD BE ESTIMATED BY TIME.

Tedious and elaborate rule-and-figure, and other descriptions of composition to be done in a number of tabular columns,—being such as may be denominated special "piece" work,—as well as most displays and general jobs, that require more or less careful arrangement and design, in addition to the ordinary labor of type-setting, should be estimated by time rather than by measurement. It is a fallacious idea that "open" display composition takes less time than "straight" or even solid work properly so-called. In a majority of instances, it will take *more* time to do it well. Such composition, to be profitable, requires an expert workman, who can readily appreciate the salient points involved in the same, although those points may not be indicated beyond mere words in the copy.

The amount of main or body matter—by which is meant that part of a subject that of necessity runs in continuous paragraphs—may be ascertained by finding out the number of words contained therein, and then determining what number of lines they will make in the type chosen for them. The space that is left, after such matter is accommodated, may then be consumed in displaying more or less prominently particular words and sentences.

In tabular work of several columns, the amount of space it will occupy may be quickly determined by simply counting the number of lines in that part of the copy, for length, and then setting up the longest word, or group of words, contained in single lines from each column, in such type as will comfortably accommodate them to the proper measure, first allowing sufficient space for the length rules and leads, if any are to be placed between the columns.

Where small cuts or diagrams are introduced in the midst of, or between, paragraphs of the main subject matter of a page or job, they should be reckoned the same as if they were type matter, when "measured," and not "time," composition is estimated.

TYPOGRAPHIC DESIGN.

The art of planning or designing work to be done with type implements, can only be acquired through natural skill, foresight, comparison, practice, and study. Experience and taste must dictate what character of outline and choice of material will produce effective harmony, and, at the same time, perspicuity, as well as determine what proportion particular letters, catch lines, etc. shall bear to each other, and in what places engravings, borders, dashes, or other ornamentation, shall be introduced.

The general principles of composing typographic effects may be set forth; but rules that will teach the process of producing original ideas, and gracefully avoiding perceptible sameness in arranging the multitude of subjects that fall into the compositor's hands, have not yet been discovered, so far as we know. The few hints that follow may prove of some service to inexperienced students of typographic design.

On taking up the subject matter for which a design is to be made, carefully scan it over, taking note of the parts that seem most important, mentally reserving them for the strong points of display. The position of minor parts of the theme may then be decided upon. Sometimes a tasteful idea, in the shape of a panel, fillet, scroll, ground-work, or the like, applied to a totally different use, can be made subservient to type design, provided the compositor possesses constructive ability enough to seize and adapt it to his work.

A good way to get up a design, is to sketch it out first on paper. A knowledge of mathematical drawing, even if limited, will also prove of great assistance.

Changes of words and phrases, when they do not mar the original sense, also contribute at times to render a device more complete. Such liberties with the text, however, should not be taken without the consent of the party most concerned in it. But it not infrequently happens that patrons expressly desire and expect this from the intelligent printer, and he is accorded reasonable latitude to shape his ideas without an arbitrary adherence to copy-lines, if the attractiveness of the printed work can be enhanced by making unimportant deviations. Except in matter admitting of *no* alteration, the privilege of making slight changes and transpositions should generally be given to the compositor, when a handsome design is demanded from him.

In all arrangements of type there should be no clumsy, over-balanced, or *unnecessarily* bold, lines; and where it is possible to have it so, the strongest effect should be brought, like that of an artistic engraving, as nearly central as possible.

In show or poster composition,—almost a distinct branch of the art,—the main point to be brought out is the immediate thing announced, which should of course challenge the attention of the beholder at once, and as strongly as possible, when printed.

Ornaments should be used to *improve* the appearance of work, and not merely because they are at hand, or to fill it up. Excessive embellishment often utterly destroys the attractiveness it is meant to increase.

Whatever shape is determined upon as appropriate for the work in hand,—whether a circle, square, triangle, oval, parallelogram, or other geometrical figure,—should be fairly proportioned and accurately formed. Thus, a circle should be a true circle, and a square a correct square, and so on.

Curved composition is handsome and attractive in proportion to its exact execution and elegant equilibrium. When inartistically performed, with little or no regard for graceful outline and the harmony of type, there is scarcely anything in typography more unpleasant to a sensitive eye.

In designing, very little importance should be attached to the minor connecting words or phrases which are to be used as catch lines. Keep the prominent features of the subject that is to be set forth in view, toning down and modifying the remainder to suit.

SETTING A STICK TO MEASURE.

Fill the stick with evenly cut leads or reglets of the length to be used, flatwise. Then place a slip of tolerably thick hard paper or thin card-board between them and the sliding-bar of the stick; press the bar squarely against them and fasten it securely.

When two or more leads of different lengths are to be used together in making up a measure, see that they fit it exactly without binding, or allowing enough room for points and thin letters to slip past their ends. Such leads should always be placed *inside* the stick as the type lines are set up. They should also be so placed between the lines of matter that the adjoining ends of one set are lapped across or "broken" by those of another, thus preventing ridges and other irregularities that a continuous use of leads of the same length, one after another, is very apt to produce.

The parallel of a stick when set may be tested by means of a carefully justified quad-line applied at top and bottom. If any deviation from accuracy is found, as will happen with worn or imperfect sticks, it may be remedied by inserting bits of hard paper or thin brass under either end of the foot of the sliding-bar, as may be required.

A stick should not be changed or "broken" until the work for which it is set shall be completed, as a very little variation in a measure, especially for page composition, is sufficient to cause bad register when the matter so set up comes to be printed. Additional sticks for the same work and measure should be made up from several lines set in the first one; and an understanding should always be had among companions engaged on the same work, that the justification, indentions, etc. may be alike with all.

POSITION OF THE COMPOSITOR AT CASE.

An erect yet natural position of the body, with the shoulders thrown slightly back, is the best to be adopted by the compositor while at work. The heels should be pretty close together on the same line, while the feet describe an angle of about forty-five degrees.

The right distance to stand *from* the case will vary in persons of different figures; but, as a general rule, from three to six inches away from the front of the stand, and slightly to the left of the middle brace of the lower-case, will be found a convenient place.

The habits of hunching the shoulders, leaning the stomach against the stand, crossing the legs, swinging the body, and other unseemly attitudes and motions, as well as wetting the fingers with spittle, tapping the letters against the boxes or stick before placing them in the latter, and rattling them unnecessarily when there, are all much better in the breach than in the observance.

Sitting down at composition should not be indulged in except where infirmity makes it really necessary for the workman.

In light composition the stick should be caused to follow the setting hand, as considerable more work can be accomplished in a day by doing

so, than if the stick be kept stationary and every type carried to it. It is also a good practice for the compositor's mind not only to regulate the mechanical operations of his fingers, but to keep in advance of them by taking off a sentence of the copy at a time,—a faculty which may be acquired after some mental practice,—and having it so ready that there shall be no "waits" or pauses that must otherwise take place.

The eyes of a compositor should also be trained to observe how a type is situated in the box, before being picked up by the responsive fingers, which should at once grasp it near the top and deftly turn it, so as to bring the nicks uppermost and the foot forward, in its passage to the stick—an action requiring altogether but a moment's time, yet of importance that its "sleight-of-hand" be in precise concert with the brain-telegraphy.

SPACING AND JUSTIFICATION.

There is scarcely anything in composition that indicates the careful and expert workman more than even spacing and good justification. By the first term is meant the equal separation, according to the formation of the letters and points, between words, so that when printed they will present a regular appearance—neither too wide asunder nor crowded together. Justification implies the tightening of the lines from end to end, so that all will be of equal length and tightnesss when locked up together in the form. The best workmen justify only moderately tight, and when a stick, containing lines of type set squarely on their bottoms, can be leaned over when the composing-rule is away, without dropping or tilting forward such lines, the latter may be said to be "well-justified."

When lines are set up, and there is a surplus of space left that will not permit the insertion of a syllable of the next word at a proper dividing place, the additional space must be distributed nearly equally along the line, allowing slightly more between such ascending letters as f b, d h, etc. where they terminate and commence consecutive words. Between e o, w y, and other short or angular letters, and after commas, less space should be allowed, as in such combinations the openings will appear as great as those that are really wider between ascending letters forming parallels, because of the curves, angles, and shoulders of the shorter letters.

In ordinary solid or single-leaded composition, (using six-to-pica leads,) the three-em or "thick-" space is deemed sufficient between words, and an em-quadrate between sentences. The increase allowed between words in justifying a line, should seldom go beyond an en-quadrate, or, at most, two thick-spaces, where neatness is expected. Exceptions to this, however, may be made in cases where the matter is very widely leaded, when the spacing should be proportionate with the distance between the lines. A space called the "patent-space," which is a medium between the en-quadrate and thick-space, is very convenient, and should be in all book-type cases.

Six-em or "hair-" spaces are placed before colons, semi-colons, exclamation, and interrogation-points, and an en-quadrate immediately after them. Hair-spaces should also be placed after inverted commas, that mark quoted words and sentences, and before the word that follows them. In some

offices, the hair-space is placed between the parentheses and bracket-marks and the words they belong to, and also on each side of an em-dash, except where one side of it is next to a comma, apostrophe, or period.

The following sentences exhibit most of these usages:

1.—"Yes: I saw him strike George; but he did it in self-defence."

2.—"Behold!—there by the river-side—is it not as I have described it?" exclaimed and demanded the man excitedly.—[*Macon (Ga.) Letter.*]

In very narrow measures, considerable management is necessary to preserve even tolerably good spacing. In such cases, hair-spacing the letters of words is better than throwing all the surplus space between them.

Bending spaces, and using substances not belonging to the case, such as wedges of wood, crumbs of paper, etc. to compel justification, should never be practiced or tolerated.

When a paragraph is completed, and a white-line is to be set up after the break, any small spaces required to justify it should be put immediately after the closing period, and not at the end of the quad-line, or scattered among the quadrates, for the reason that this keeps the spaces compactly in the best place for them, and saves time in distribution afterward.

INDENTION.

The space used in setting inward from the beginning the first line of ordinary paragraphs, is what is usually meant by this word, although it is applied to indicate other modes of arranging type matter.

No indention is required in paragraphs begun with an initial letter, nor should there be any made in the opening paragraph of a subject, or after chapter and other caption lines other than sub-heads.

An em-quadrate is commonly used before paragraphs in newspapers, and where measures are less than twenty-six ems of nonpareil and not more than twenty-two ems of pica in width. In wider measures, an additional thick-space, and even as much as three ems, gives a better appearance to composition.

This paragraph is indented according to what is variously called side, hanging, and under indention, a style principally employed in the introductory paragraphs of legislative and other legal printing; in the summary lines of chapters and tables of contents; in indexes where there are several lines to an item; in catalogues, etc.

This paragraph is set up in the technically termed "double-hanging" or increasing indention method, and is chiefly used in titles, dedications, advertisements, circulars, hand-bills, and other display work.

Cut-in indentions are those where enough of the subject matter is set inward to admit marginal notes referring to the contents of the paragraphs wherein they occur. They are also employed to let into the paragraph or page embellishing words, letters, and cuts, when the latter are to be printed separately.

TO EMPTY A STICK.

Place the composing rule along the outside of the *last* line; grasp the matter set up firmly at the ends with the forefingers and thumbs, at the same time pressing the middle fingers *against* the ends of all the type lines; then lift the mass out carefully, bearing it toward you so that the *first* line shall be uppermost. Then deposit it on a galley, being cautious to have all the matter squarely on its feet or bottom. Any type that may stand above the others should be pressed down with the soft parts of the fingers. Finally, square it up by pressing the rule flatwise along the ends of the lines, and place a slug or piece of metal furniture against the matter, to prevent its falling down if jolted, while additional stickfuls are being set up.

DISPLAY COMPOSITION.

In most job or "display" composition, careful spacing of the words and letters, and having the lines in good proportion to each other, greatly enhances the attractiveness and equipoise of the work.

In some cases,—especially among the larger sizes of capitals cast on square or expanded bodies,—letters of peculiar shapes, like **WY**, **LJ**, etc. do not stand well together, but present a detached appearance; while **ES**, **DB**, and other combinations occurring in the same word, perhaps, come closely together. Where it can be done, the distance between letters should be equalized as much as possible, particularly in prominent lines. The letters **ES** look better with a bit of card or a hair-space between them in most instances where their faces are wide.

The two following lines will show the difference in appearance between spaced and unspaced letters:

LANE WYLIES' BEST.

LANE WYLIES' BEST.

In spacing out display lines, the formation of the letters used should not only be considered, as above, but also whether they be condensed, regular, or extended, in order that the spacing between words may be determined. As a general rule, en-quadrates should be placed between words set up in capitals and small capitals used together; and two three-em spaces between capitals used alone, when the type is slightly condensed or moderately light, like romans. A proper increase of space should be made to this allowance for very full-faced or extended type. Lines set up in extra-condensed lower-case, long, narrow-faced texts, and some other styles, require less space than those mentioned above. Nothing looks worse than widely spaced lines of condensed text. We give some examples of spacing on page 22.

Bad Spacing.

AMONG MANKIND EVIL ASSOCIATIONS CORRUPT GOOD MORALS.

Correct Spacing.

AMONG MANKIND EVIL ASSOCIATIONS CORRUPT GOOD MORALS.

Bad Spacing.

EXPLANATION OF THE DIAGRAM ON THE OPPOSITE PAGE.

Correct Spacing.

EXPLANATION OF THE DIAGRAM ON THE OPPOSITE PAGE.

Bad Spacing.

LIST OF BOOKS ON HAND:

Correct Spacing.

LIST OF BOOKS ON HAND:

Bad Spacing.

Mr. & Mrs. William S. Du Pont.

Correct Spacing.

Mr. & Mrs. William S. Du Pont.

When fancy or other initial letters larger than the body type of the matter with which they will go are introduced, the remainder of the beginning word of the subject should be in capitals or small capitals, and made to "line" exactly at the top with the initial letter itself, and not with the ornamental work that may surround it, except when the initial is on a ground and surrounded by a line or border, in which case the top of the first line will look best if lined with the top edge of the bordering line.

Composition in script type needs to be spaced according to the shape of the various letters. In many scripts, shoulders of different widths occur on the bodies of the capitals, points, etc. and little or no space need precede or follow them. Carelessly spaced script is very unpresentable.

When a large broad letter has a period or comma after it, less space than between words should be used, as the wide shoulder at the top of these characters will make up for the difference.

The use of two points together—for instance, a comma after a period denoting an abbreviated word or initial—is now ignored by most good *job* printers. It certainly does not improve a *display* line to have two points next each other. In book work, however, both points are generally used.

In composing curved work, it is best to form a frame of metal furniture the size of the page or job, within the chase that it will be worked in, and arrange it on an imposing stone or a slice galley. Place the straight matter



(No 3.)



(No. 4.)

inside of this frame first, and then form your curvatures as desired, so that when the job is done, you may lock it up at once and move it without danger of having the arrangement shattered.

In offices where there are no founts of labor-saving curvatures,—which are very useful, by the way,—they may be made from thin brass reglets cut lead height. Bent leads are unprofitable except for small curves.

Ground plaster of Paris, mixed with water to the consistency of a thin paste, and carefully poured around complicated curved lines, is probably the quickest means of completely justifying them in the form. There are objections to the use of this plaster about a printing office; but, if handled by a skilful workman, it can be made quite serviceable in all kinds of intricate work without material detriment.

The principal beauty of all display composition proceeds from the judicious bringing together of harmonious type faces, rather than by means of overwrought, and frequently confusing, combinations, made up of things individually handsome, but rendered distasteful from there being too many similar ones placed together. Ornament often enhances the beauty of job composition; but, to be really effective, it must be relieved by contrast with what is simpler and plainer than itself.

The lines of display composition to be attractive must vary in their sizes and degrees of strength, exhibiting, as it were, the effects of light and shade. A long line should be placed between two shorter ones neither of the same length, and these again harmonized to others longer or shorter than themselves. Several lines of the same length (except in poster work between rules) following each other, do not look neat. Lines of large, heavy letters need to be relieved with smaller light ones in the same manner.

The crowding together of heavy-faced type—expressively called "loud" by printers—with but little space between lines to relieve them, in such descriptions of work as business cards; letter, note, and bill-heads; blanks; circulars (except small hand-bills); title-pages; and other kinds of printing intended more particularly for private circulation and perusal, we consider in bad taste. It is true that patrons frequently demand such arrangements under the mistaken idea that they are getting a more "telling" effect. But we suspect this occurs, in many cases, more from the spirit of imitating others than from reflection about the matter. What advantage accrues by so flagrant a departure from every rule of neatness, as is often exhibited by printers as well as customers in this respect, we have as yet failed to discover, holding, as we do, that clearly defined elegance—distinct, but well relieved with liberal margins—is far more impressive upon popular appreciation than the blackest clumsiness.

Handsome results may be had from type of a uniform style of face, provided the variety of sizes will allow them to relieve each other.

Flourishes made from brass rule, or cast on type bodies, have not yet reached the perfection that should make them much sought after by printers, although just at present the disposition to use them prevails. In the hands of an artistic compositor they can be arranged pleasingly; but

for ordinary purposes they are extremely unadaptable as well as troublesome. In our estimation they belong to the time-wasting things, and may properly be said to be among the patience-trying, money-losing implements of a printing office.

Sloping or italic faces of type intermingled with stiff, perpendicular sorts, do not produce an agreeable effect when printed. Broad-faced texts, the lower-case of neat antiques, gothics, and a few other styles, harmonize, and at the same time contrast, with sloping letters best.

When a piece of composition is done with a view to having it printed in several colors, finely shaded or very ornamental type should be sparingly used, as the colors, if at all delicate, will not show off to advantage on such faces. Colors require surface to be effective. The matter for such printing should be set up all together and proved until satisfactory. An impression taken on dry, hard paper should then be used as a pattern in arranging the lines for the different colors. If quad-lines of the same body as the lines removed are put in their places, a form can be made up for the press much quicker and more correctly than if reglets or numerous leads are used, as the last will yield more or less, whereas the first will not.

The division of a form for printing in several colors should be made so that no preponderance of any one color will be noticeable when printed. The principal display lines should be in the darker or stronger colors.

If card or other paper spacing is used in composition intended to be divided for several colors, it must not be wet, as that will cause the paper to swell, thus destroying the justification of the lines, and impairing the register where exactness is necessary.

The production of many varieties of ornamented and plain rules, together with the improved facilities whereby to mitre and curve them, afford much assistance to an ingenious compositor in executing his designs. Whether such rules be used in combination with corner and centre pieces, or separately, if handled artistically and with a due regard for symmetry, they always produce a pleasing effect, quite equal, if not superior, to the complicated combination borders that require much time to put them together well.

A simple but neat arrangement of rules that have straight lines for faces may be made by crossing them at the corners at right angles and carrying the ends past the point of intersection. This may be done by slotting the pieces with a saw exactly as thick as the rule, cutting one piece half way from the top and the other half way from the bottom. Or, it may be done by the compositor using rules long enough to include the projecting ends one way. Then put in the pieces that go the other way, setting them inward as far as the projecting ends are to be in length—say a long-primer, pica, great-primer, etc. Supply the other projecting ends where they are needed by justifying pieces cut to the size of the others and carefully squared, so as to fit up closely against the longer rules.

When type matter is emptied upon a galley that is laid upon a case, it should be well squared against the ledges of the galley, so that it will be

perpendicular when locked up to prove. Carelessness in this particular, especially with solid matter, often brings it to press slightly canted or "off its feet," giving considerable trouble to rectify.

It is of importance after a piece of composition is done, to see that it is fairly "opened out," or with the lines so separated as to preserve a good balance relatively. It often occurs that otherwise really good work is marred by neglect or ignorance of this particular. We subjoin an illustration:

Well Balanced.

HAWLEY'S

STATIONERY AND NEWS DEPÔT,

MANUFACTORY OF

PHOTOGRAPH ALBUMS,

AND AGENCY FOR

HITCHCOCK'S MUSICAL PUBLICATIONS.

164 VINE ST. CINCINNATI.

Badly Balanced.

ROYER WHEEL COMPANY,

Manufacturers of the

SARVEN PATENT WHEEL,

Also, Spokes, Hubs, Felloes, Shafts, Poles, and all other Wood Work used by Carriage Makers.

Office, No. 375 West Third Street, below Smith,

CINCINNATI.

Imprints, when they are admissible in fine composition, should be set small and placed where they will not be too prominent, otherwise they become offensive and are liable to be ordered out by the patron.

Novices must be cautious to remember that the combinations fi, ff, fl, ffi, ffl, in founts of Roman type, are cast on one body on account of the

kerns of the fs, which would be broken off or throw the letters out of perpendicular if set up separately. The dipthongs Æ, Œ, æ, œ, are not proper when formed with two single letters.

When letters are lower than others, from wear or other causes, they may be brought to the proper height by tapping them a little on each side of the lower end.

BOOK COMPOSITION.

Title-pages belong properly to display composition, and the beauty of them depends to a great extent upon the taste of the compositor. Whether titles are set up plainly or with ornamented type, they should never be crowded, but free and open. We think that simple elegance, more than show, in title-pages, prepossesses one toward current books or pamphlets.

The Dedication goes directly after the Title, and should be tastefully set up with text and italic, or with capitals and small capitals, well displayed and opened out. Dedications seldom occupy more than one page, and, if not too long, afford the compositor an opportunity of showing his taste as much as would title-pages.

The Summary of Contents is placed immediately before the Preface of a book. The Index goes at the end of the work, and should be alphabetically arranged. Such matter is set in type two sizes less than that of the text. When the summary lines of chapters or index items make more than one line, those which follow have a side indention of not less than one em.

Prefaces and Introductions are sometimes set larger and sometimes smaller than the text. We prefer using the same size of type as in the body of the work, distinguishing the prefatory remarks, if necessary, by wider leading. The use of Roman numerals for folios in the introduction also gives it a distinctiveness, thus: iii for 3; xiv for 14, etc. The letter for running heads is best to be alike throughout a book—introduction and all. We have departed from this rule in the specimen pages of the present volume in order to show as great a variety of headings as possible.

Running head-lines of pages, and sub-heads designating passages in the subject matter, are usually put in the small capitals or italic of the body letter employed, or in small, well-cut, light-faced antiques or gothics. Some other styles of plain faces, such as celtics, and even ornamented texts, look very well in such places also.

Set foot-notes—those that are placed at the bottoms of book pages—in type two or three sizes smaller than that of the body of the work. Do not let them be too close to the text, and cut them off from it by means of a plain single rule, about one-third of the width of the page in length, and placed on the left hand side squarely with the edge. Foot-notes, extracts, and all introduced sizes of type, whether larger or smaller than the text, should have the same indention—as, for instance, if pica be the body type, with an em indention, and nonpareil be used for notes, the latter should have two ems indention to correspond with the one em of pica.



(No. 5.) THE WHIRLPOOL—ROCKCASTLE RIVER.



(No. 6) VIEW IN YOSEMITE VALLEY.

By permission—from the "Illustrated Union Hand-Book for 1871," published by C. W. Starbuck & Co. of the Cincinnati Times.

Side- or marginal-, cut-in-, and centre-notes, are always put in type at least two sizes smaller than the text. They often require skilful management to make them appear to good advantage. When possible, a measure of even ems of pica should be adopted for marginal-notes, so that quotations and metal furniture, graded to pica ems, may be used to advantage when making up the pages. Side-notes always occupy the *outer* or cut margins of pages, and are principally used in legal and other works of reference. Cut-in notes are those that are let *into* the text, and are generally placed opposite the lines they refer to. Nice care is required to arrange, space, and justify them right. They must not interfere or come in contact with the subject matter, but be somewhat detached from it, yet show they belong to it. It is best to frame them in with accurately cut nonpareil slugs and leads, which will keep the notes at a uniform distance from the subject matter, and, at the same time, permit them to hold their proper positions opposite the lines or paragraphs they indicate.

When items of an index refer to matter occupying several consecutive pages, the first and last folios only are given, divided by an en-dash. thus: 16–19; but when pages are not consecutive, they are all given, with commas between them, thus: 2, 5, 6. Figures used in columns, or justified at the end of index lines, have no periods after them. When items or paragraphs terminate with folios or other figures that occur regularly, they should be carried nearly as far as to where the figure columns begin —not interfering with the latter, but squarely justified to within say an em-quad of the first figure line.

When a column is so narrow as to necessitate setting the head-lines lengthwise, or up and down the column, it is customary to have them read from the bottom toward the top of the space allotted to them, and to line along the lower or commencement end.

Rules that divide columns, when separated from the matter on either side of them with one or two six-to-pica leads, give a freer and neater appearance to such work.

Length-rules for table composition should be cut exactly, and if two or more pieces are used in a length, the joints dressed smoothly and evenly.

A number of columns belonging to the same table, in which figures of the same body only are employed, may be set at one time and the dividing rules inserted afterwards; but, when words are in some columns and figures in others, it is best to set each column separately.

The explanatory headings of tables are neatest when set in type smaller than the column figures or matter. They should, however, be quite distinct, so as to be easily read. Fancy type can rarely be used to advantage for table headings.

A word that requires division at the end of a line of type should retain the full strength of the first syllable, or first and second syllables, in the first line, and be divided, according to its length and construction, as near the centre as may be. Such words as *i-dle*, *a-bout*, *o-ver*, etc., are never divided, nor are terminating syllables like *-ed* in *compounded*, *-ty* in *variety*, etc., carried into the second line. Where a syllable is completed by a

vowel, like the second ones in *ele*-gance, *perse*-verance, *divi*-sion, etc., it is customary to make it the place of division, although it would be improper to do so on the first syllable in such a word as *e*-ternity.

Our space is too prescribed to give further remarks upon the subject of dividing words in composition; but observation of general usage in this respect, shown in well-composed books, etc., will soon set the novice right.

Although information regarding punctuation is important to compositors, it cannot be properly entered upon herein for want of room. We take pleasure, therefore, in referring the reader to a very comprehensive work upon the subject—Mr. JOHN WILSON'S "*Treatise on English Punctuation*"—to be had of most type-founders and booksellers.

PROVING AND CORRECTING.

Composition proved on brass galleys should have a *single* iron or other side-stick fully as long as the matter; and when the quoins are well pressed up with the fingers, the lock-up should be sufficient to keep the matter tight enough to prove. Driving up quoins with a mallet and shooting-stick in galley lock-ups soon shatters the galley.

Before planing down galleys or forms in chases, wipe off the planer with the hand, and then lay it flatly and gently upon the faces of the type. Tap it lightly with a small mallet or the butt of an iron shooting-stick, taking care that there shall be no double strokes or rebound of the planer. Scripts, hair-lines, and other delicately formed letters, should always be pressed down with the fingers, and planed *very lightly* if at all. *Heavy* planing is not necessary in any case if the type is set and made up properly in the first place; and it is always hurtful to the material to indulge in the cooper-like "rattle and bang" one sometimes hears in offices where the durability of material seems to be ignored.

In proving type, either on galleys or in chases, it should be inked with a roller that is free from dirt or dried ink. Paper slightly dampened and kept from the air between boards is best for proofs, as it will take the ink with a much lighter impression than dry paper. Proving by the brush or planer is bad for the fine lines of type. Several thicknesses of damp paper laid on the type, and a thin, fine cloth blanket on top of the paper, before "beating off," will cause the least damage; but only careful persons ought to be allowed to perform this kind of proving where it can not be otherwise avoided.

When correcting lines of type that contain errors, lift them up by the ends, and take out the wrong letter or word with the fingers. Never stick bodkins or knives between words to get them out, nor use the spring-bodkin to pull out a letter. Prying out a letter or space by sticking the point of a bodkin in it is simply outrageous. If an alteration is to be made in spacing or phraseology, take out the lines and adjust them *in the stick*. It is a slovenly and unworkmanlike habit to strew the stone and furniture of a form with the debris of correction. All changes marked in the proof that involve re-spacing or overrunning, should always be made at the case.

PROOF READER'S MARKS.

The following useful table of typographical proof marks is taken from Mr. THOS. MACKELLAR'S excellent work on typography, "*The American Printer*," published by Messrs. MacKellar, Smiths & Jordan, the well-known and popular type-founders of Philadelphia. We have reversed the order of Mr. MacKellar's "Explanation" for our own convenience in imposing pages 30 and 31:

EXPLANATION OF THE MARKS ON PAGE 30.

A wrong letter in a word is noted by drawing a short perpendicular line through it, and making another short line in the margin, behind which the right letter is placed. (See No. 1.) In this manner whole words are corrected, by drawing a line across the wrong word, and making the right one in the margin opposite.

A turned letter is noted by drawing a line through it, and writing the mark No. 2 in the margin.

If letters or words require to be altered from one character to another, a parallel line or lines must be made underneath the word or letter,—viz. for capitals, three lines; small capitals, two lines; and Italic, one line; and in the margin opposite the line where the alteration occurs, *Caps*, *Small Caps*, or *Ital.* must be written. (See No. 3.)

When letters or words are set double, or are required to be taken out, a line is drawn through the superfluous word or letter, and the mark No. 4 placed opposite in the margin.

Where the punctuation requires to be altered, the correct point, marked in the margin, should be encircled. (See No. 5.)

When a space is omitted between two words or letters which should be separated, a caret must be made where the separation ought to be, and the sign No. 6 placed opposite in the margin.

No. 7 describes the manner in which the hyphen and ellipsis line are marked.

When a letter has been omitted, a caret is put at the place of omission, and the letter marked as No. 8.

Where letters that should be joined are separated, or where a line is too widely spaced, the mark No. 9 must be placed under them, and the correction denoted by the marks in the margin.

Where a new paragraph is required, a quadrangle is drawn in the margin, and a caret placed at the beginning of the sentence. (See No. 10.)

No. 11 shows the way in which the apostrophe, inverted commas, the star and other references, and superior letters and figures, are marked.

Where two words are transposed, a line is drawn over one word and below the other, and the mark No. 12 placed in the margin; but where several words require to be transposed, their right order is signified by a figure placed over each word, and the mark No. 12 in the margin.

Where words have been struck out that have afterward been approved of, dots should be marked under them, and *Stet* written in the margin. (See No. 13.)

Where a space sticks up between two words, a horizontal line is drawn under it, and the mark No. 14 placed opposite in the margin.

Where several words have been left out, they are transcribed at the bottom of the page, and a line drawn from the place of omission to the written words (see No. 15); but if the omitted matter is too extensive to be copied at the foot of the page, *Out, see copy*, is written in the margin, and the missing lines are enclosed between brackets, and the word *Out* is inserted in the margin of the copy.

Where letters stand crooked, they are noted by a line (see No. 16); but where a page hangs, lines are drawn across the entire part affected.

When a smaller or larger letter of a different fount is improperly introduced into the page, it is noted by the mark No. 17, which signifies wrong fount.

If a paragraph is improperly made, a line is drawn from the broken-off matter to the next paragraph, and *No* ¶ written in the margin. (See No. 18.)

Where a word has been left out or is to be added, a caret must be made in the place where it should come in, and the word written in the margin. (See No. 19.)

Where a faulty letter appears, it is marked by making a cross under it, and placing a similar one in the margin (see No. 20); though some prefer to draw a perpendicular line through it, as in the case of a wrong letter.

MARKED PROOF SHEET.

THOUGH several differing opinions exist as to the individual by whom the art of printing was first discovered; yet all authorities concur in admitting Peter Schoeffer to be the person who invented *cast metal types*, having learned the art of *cutting* the letters from the Guttembergs he is also supposed to have been the first who engraved on copper plates. The following testimony is preseved in the family, by Jo. Fred. Faustus, of Aschaffenburg:

'Peter Schoeffer, of Gernsheim, perceiving his master Fausts design, and being himself desirous ardently to improve the art, found out (by the good providence of God) the method of cutting (*incidendi*) the characters in a *matrix*, that the letters might easily be singly *cast* instead of bieng *cut*. He privately *cut matrices* for the whole alphabet: Faust was so pleased with the contrivance, that he promised Peter to give him his only daughter Christina in marriage a promise which he soon after performed.

But there were many difficulties at first with these *letters*, as there had been before with wooden ones, the metal being too soft to support the force of the impression: but this defect was soon remedied, by mixing a substance with the metal which sufficiently hardened it

and when he showed his master the letters cast from these matrices,

CORRECTED PROOF SHEET.

Though several differing opinions exist as to the individual by whom the art of printing was first discovered; yet all authorities concur in admitting PETER SCHOEFFER to be the person who invented *cast metal types*, having learned the art of *cutting* the letters from the Guttembergs: he is also supposed to have been the first who engraved on copper-plates. The following testimony is preserved in the family, by Jo. Fred. Faustus, of Ascheffenburg:

'Peter Schoeffer, of Gernsheim, perceiving his master Faust's design, and being himself ardently desirous to improve the art, found out (by the good providence of God) the method of cutting (*incidendi*) the characters in a *matrix*, that the letters might easily be singly *cast*, instead of being *cut*. He privately *cut matrices* for the whole alphabet: and when he showed his master the letters cast from these matrices, Faust was so pleased with the contrivance, that he promised Peter to give him his only daughter *Christina* in marriage, a promise which he soon after performed. But there were as many difficulties at first with these letters, as there had been before with *wooden ones*, the metal being too soft to support the force of the impression: but this defect was soon remedied, by mixing the metal with a substance which sufficiently hardened it.'

DISTRIBUTION.

Type matter that has been printed from, and is not likely to be required again immediately, should be distributed at once; or, if it be not convenient to do so, it should at least be divested of leads and white-lines, tied up squarely and firmly, and placed where it will be least in the way but not forgotten.

Matter that is to be distributed immediately needs to be wetted by means of a sponge containing *clean* water, unless the type be large and easily handled, when wetting will not be necessary. Take just enough type in the hand so it may be comfortable and easily handled. The matter should rest on a stout slug or brass rule, and be held firmly between the inside of the thumb and first two fingers of the left hand. Acquire the habit of taking off entire words in distributing, and lightly *lay* the letters lengthwise in their respective boxes and with the faces toward you. Never "pepper" them into the case sharply, without regard to how they fall, as it injures them, and makes future composition less easy than the better method.

IMPOSING AND LOCKING UP.

Forms for most kinds of job printing are usually imposed with the head toward the workman, and locked up in the centre of the chase each way. The straight furniture should be placed at the head and left side of the form as it lies on the stone. The beveled side and foot pieces should be long enough to brace every part without binding upon each other. The quoins—which should be two to three in number each way—need to be first fitted in tightly with the fingers; but not so tight as to require great force to get them in place. After pressing the quoins well up toward their final places, plane the form gently, and then proceed to complete the lock-up by using the mallet and shooting-stick, striking the quoins at side and bottom alike. Lock up by degrees, in about two or three operations, graduating them according to the size of the form. Always commence the lock-up by first striking the smallest quoins at side and bottom alternately; then the next in size, and so on, till all have been tightened sufficiently to keep the matter of the form compactly together, so that it will "lift" and admit of being moved without danger of falling apart. Raise the form a little before taking it off the stone, to see if any type are loose.

After a form is properly locked up, the bottoms of the type should be brushed off with a clean, stiff brush, to remove any small particles of lead, dirt, or paper that may have got on them accidentally.

A form of pages locked up in sections is merely a grouping of single forms, and involves the same principles in locking them up, only the heads all go toward the centre or cross-bars of the chase. The diagrams which follow will sufficiently indicate how a book form should be locked up.

In unlocking, commence by unloosing the top and bottom quoins. If a quoin sticks tightly from having swelled when wet, it may be unlocked with ease by first driving it up or tightening it a little.

IMPOSITION OF BOOK PAGES.

Limited space prevents the introduction of many remarks or diagrams relating to book imposition. We take the liberty, however, of extracting a few useful remarks, etc., from Mr. GEORGE H. BIDWELL'S "*Treatise on the Imposition of Forms*," a most comprehensive little volume, which we cordially commend to our fellow-craftsmen:—

A knowledge of the Imposition of Forms is an essential, if not an indispensable, element in the education of every person who works at the printing business. It is, indeed, a necessity in every book and job printing office; and even to some extent, at least, in every office where only an occasional pamphlet is printed.

Without this knowledge, whatever the journeyman's skill or other attainments, he cannot be considered a thorough master of his business; and though he may excel in some specialty, there will be this important branch in which his deficiency may be a bar to the advancement which his capabilities would otherwise gain for him.

Before the invention of stereotyping, the imposition of forms belonged exclusively to the composing room; and it was incumbent on the compositor that he should be able to take his turn in imposing and sending forms to press. But since the general introduction of the stereotyping process, this duty has been divided between the compositor and pressman; and though much neglected of late years by compositors, a knowledge of this subject is equally essential to the finished workman in either department.

In order to attain a good knowledge of the imposition of forms, the learner should know something of the subsequent process; that is, of the manner of turning the sheet on the press, and of folding the sheet after it is printed; and to the younger portion of our readers, especially, an explanation of the few technical terms which will be used, may be necessary.

Explanation of Terms.

First is the PAGE, the four sides of which we denominate the HEAD, FOOT, FRONT, and BACK. The head is that part which stands at the top of the leaf in the printed book; the foot at the bottom; the front at the outside, either on the right or left as the book lays open; and the back at the inside or between the two pages. Pages are also said to BACK when printed on both sides of the sheet. The front of the odd pages, as they lay in the form, is on your left hand, and of the even pages, on your right hand, standing at their foot—reversed, of course, from what they appear on the printed sheet or in the book. The back is on the opposite side of each page from the front. The FOLIO, or number of the page, when a running title is used, is placed on the outside or front of each page.

The CHASE is the oblong iron frame in which the pages are secured for printing. It has two bars dove-tailed into the frame in the center each way and crossing each other at right angles, which are called the LONG CROSS and the SHORT CROSS.

The MARGIN is the space put between the pages in the form, so as to bring each page in the right position on the leaf of the printed book.

The SECTION is the term applied to the sheet, or so much of it as is folded up together and taken in at one stitch by the binder. If you dissect a bound volume, you will find it made up of a number of sections consisting of leaves laid one within the other, each section being sewed through the back and fastened to cords which run across the back and secure the cover. Each leaf of the section contains four pages, two odd and two even, one of each on each side. The section may be made of as many leaves as you like, but they usually consist of from two to six, according to the number of pages you desire to print at a time. More than six leaves in a section, except for pamphlets of a single section, makes a clumsy job for the binder, and renders him unable to bind the book neatly and substantially.

The INSET, or subsection, is that portion of a sheet containing the middle pages of the section, and which is cut off and folded up separately, but placed within the center of the main section in binding. The inset is necessary in forms which have an odd number of pages in one direction, as will be explained hereafter.

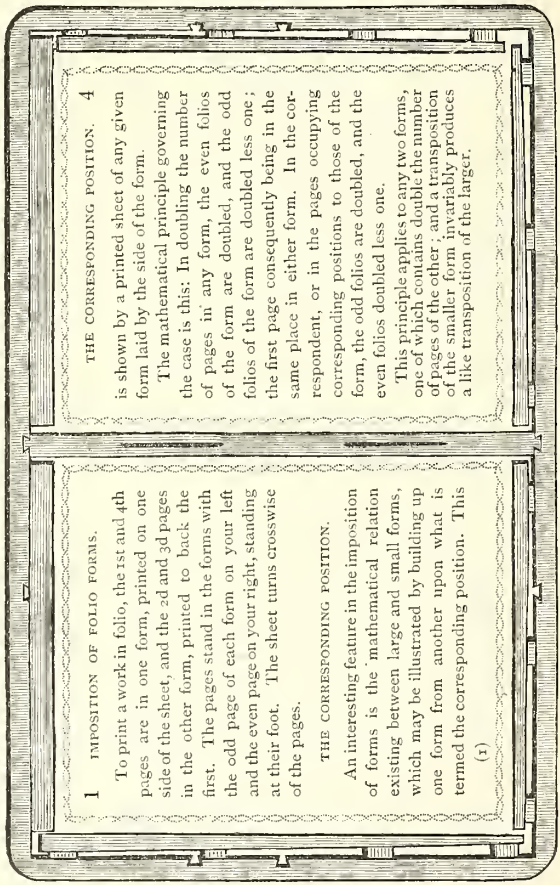
REGISTER.—The form registers when the pages printed on one side of the sheet are exactly on the back of those on the other.

The SIGNATURE is the figure placed at the foot of the first page of each form, section, or subsection, as a guide to the binder. The letters of the alphabet were formerly used for signatures; but now they are seldom used, except in works designed to be printed in different forms, as 8vo and 12mo. Then double signatures are required, and letters are used for one set.

The RUNNING TITLE is the line placed at the head of each page, denoting either the title of the book, the subject of the chapter, or the subject-matter of the page.

Laying the Pages of Simple Forms.

The object sought in all impositions is to so arrange the pages that they will come in regular consecutive order when the sheet is folded, and the proper pages face and back each other in the bound book. The pages that back are the odd and even consecutively, as 1, 2; 3, 4; 5, 6; etc. Those that must face each other in the book are the even and odd consecutively, as 2, 3; 4, 5; 6, 7; etc. The pages are backed by turning the sheet after it is printed on one side, and printing it on the other side. They are faced by the process of folding the sheet after it is printed.



1 IMPOSITION OF FOLIO FORMS.

To print a work in folio, the 1st and 4th pages are in one form, printed on one side of the sheet, and the 2d and 3d pages in the other form, printed to back the first. The pages stand in the forms with the odd page of each form on your left and the even page on your right, standing at their foot. The sheet turns crosswise of the pages.

THE CORRESPONDING POSITION.

An interesting feature in the imposition of forms is the mathematical relation existing between large and small forms, which may be illustrated by building up one form from another upon what is termed the corresponding position. This

(1)

THE CORRESPONDING POSITION. 4

is shown by a printed sheet of any given form laid by the side of the form.

The mathematical principle governing the case is this: In doubling the number of pages in any form, the even folios of the form are doubled, and the odd folios of the form are doubled less one; the first page consequently being in the same place in either form. In the corrspondent, or in the pages occupying corresponding positions to those of the form, the odd folios are doubled, and the even folios doubled less one.

This principle applies to any two forms, one of which contains double the number of pages of the other; and a transposition of the smaller form invariably produces a like transposition of the larger.

This diagram shows the method of imposing and locking up the outer half of a Folio Signature.

The First Page.—The Starting Point.

The starting point in all impositions which are called regular, is to lay the first page on the corner at your left hand, with the foot of the page toward you. The first page of every form being necessarily an odd page, you will have the front of the page on your left, and the back of it on your right hand.

The Invariable Result.

The invariable result in all forms of a single section, or in all sections, of whatever number of pages the form or section may consist, when completed, is, that the last page stands by the side of the first, back to back and heads on a line; the second and next to the last in the same position; the third and third from the last; and so on, advancing one from the first folio and receding one from the last, until you come to the two middle pages, which are in the 4to the 2d and 3d; in the 8vo, the 4th and 5th; in the 12mo, the 6th and 7th; in the 16mo, the 8th and 9th; in the 24mo, the 12th and 13th; and so on. The knowledge of this fact enables you to complete any form after one-half of the pages are laid down.

The Second Page.—Turning the Sheet.

Having got the starting point, the next step is to ascertain where to place the second page, so that when the sheet is turned it will back the first. In order to place the second page, you must know how the sheet is to be turned; and here it may be necessary to remark, that the paper being longer one way than the other, it is almost invariably the rule to turn it in the direction of its length, because in most forms this makes a more convenient form for the binder in folding, and the sheet is registered with greater facility on the press, particularly on the hand press. Besides, turning the sheet uniformly the same way is a convenience to the pressman, who is never in such a case at a loss to know how to turn it.

The 12mo is an exception to this rule, and must necessarily be turned in the direction of the width of the sheet and of the pages, because in the direction of their length there are only three pages; and if turned in that way, the middle row of pages would not only back themselves, but would back head to foot on opposite sides of the sheet.

Rules for laying Pages that back each other.

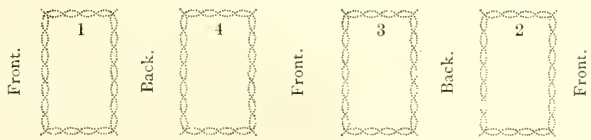
When the sheet turns in the direction of the length of the pages, as in the 16mo, the pages that back each other must be placed in exactly corresponding positions on opposite sides of the bar, head to head or foot to foot.

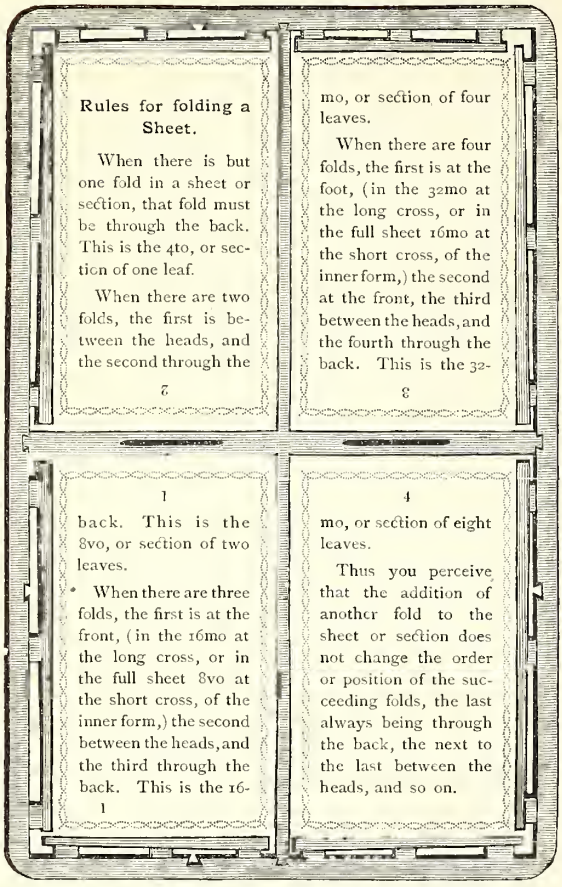
When the sheet turns in the direction of the width of the pages, as in the 8vo, those that back must be placed in exactly corresponding positions on opposite sides of the bar, heads on a line.

What is meant by corresponding positions in the imposition of forms, is, that the pages shall be at the same distance from, and on opposite sides of, the bar, or center of the sheet, in a right line. Thus, one page being at the extreme end or side of a form, another, to be in a corresponding position, must be at the opposite extreme end or side. The corresponding position is shown by a printed sheet of the same number of pages laid by the side of the form. (See page 34.)

These rules enable us to place the second page in any form whatever, and to lay any even numbered page after the odd numbered page which immediately precedes it is down In the 16mo or 4to, for instance, the sheet turning in the direction of the length of the pages, and the first page being laid at the left hand lower corner, with the foot toward you, the second page, backing the first, must necessarily be placed at the left hand upper corner, with the head toward you. In the 8vo or 4to, the sheet turning in the direction of the width of the pages, the second page, in order to back the first, must be placed on the right hand lower corner, the head on a line with the first page. In either of these cases, the 4to may now be completed by placing 3 by the side of 2, and 4 by the side of 1, backs together.

No. 1.—THE QUARTO—SHEET TURNING CROSSWISE OF THE PAGES.





No. 2.—THE QUARTO—SHEET TURNING LENGTHWISE OF THE PAGES.

The Third Page—Folding the Sheet.

The first and second pages, which back each other, being disposed of, we must place the third so that when the sheet is folded it will face the second; and here, before we can proceed any further, we must understand the process of folding. To illustrate this, let us take the 16mo; tho' what is said on this point applies equally well to all simple forms. You will notice that when the sheet is turned, the lower or outer half is printed on the back of the upper or inner half, and *vice versa*. After the sheet is printed on both sides it is cut in two transversely to the direction in which it is turned; that is, if it is turned in the direction of the long cross, it must be cut at the short cross, and *vice versa*; and you have a duplicate of the form, or all the pages in the form on each half sheet.

The outer half of a form or section is the half which contains the first or signature page; and the inner half that which contains the second page. When the sheet is laid on the table ready for folding, the outer half is on the under side, with the signature at the left hand, and of course the inner half is on the upper side, all the pages of which will be faced by the first fold; all the remaining folds, be they more or less, being required to face the pages of the outer half.

The Fourth Page.—The 8vo Completed.

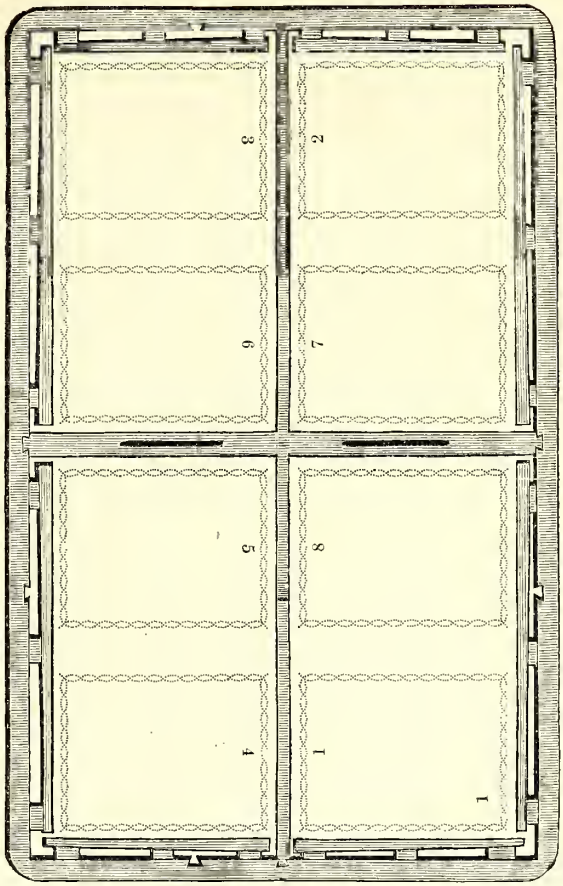
Page 4, backing the third, must be placed in an exactly corresponding position on the opposite side of the bar; head to head in the 16mo, and head on a line with 3 in the 8vo, the sheet in these forms turning in different relations with respect to the length or width of the pages. This enables you to complete the 8vo, applying the rule already stated at the starting point by placing 5 by the side of 4; 6 by the side of 3; 7 by the side of 2; and 8 by the side of 1, backs together. (See Diagram No. 3.)

The Fifth Page—The Second Fold.

We have now the four corners of the form of 16s filled. Page 4, backing 3, and being on the outer or under side of the sheet as it lies on the folder's table, the first fold brings it to the upper side; and as 4 (being one-fourth of the whole number in the form) must be faced by the second fold in a form having three folds,—which is the case with the 16mo,—and as the second fold must be between the heads in order to face 4 and 5, you must place 5 head to head with 4.

The Sixth Page,

backing 5, must be on the opposite side of the bar; and as the foot of 5 is toward the bar, the foot of 6 must also be toward the bar, which will bring it head to head with 3.



No. 3.—THE REGULAR OCTAVO—SHEET TURNING CROSSWISE OF THE PAGES.

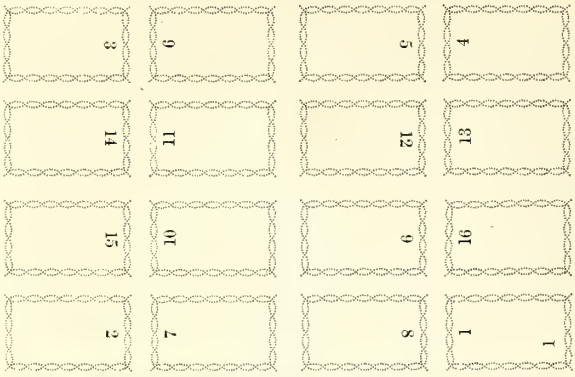
The Seventh Page.

Page 6 being head to head with 3, and being in the inner half of the form, and embraced in the same fold (through the long cross) which faces 2 and 3, 7, in order to face 6, must be placed in the same relative position to 2 that 6 is to 3; that is, head to head.

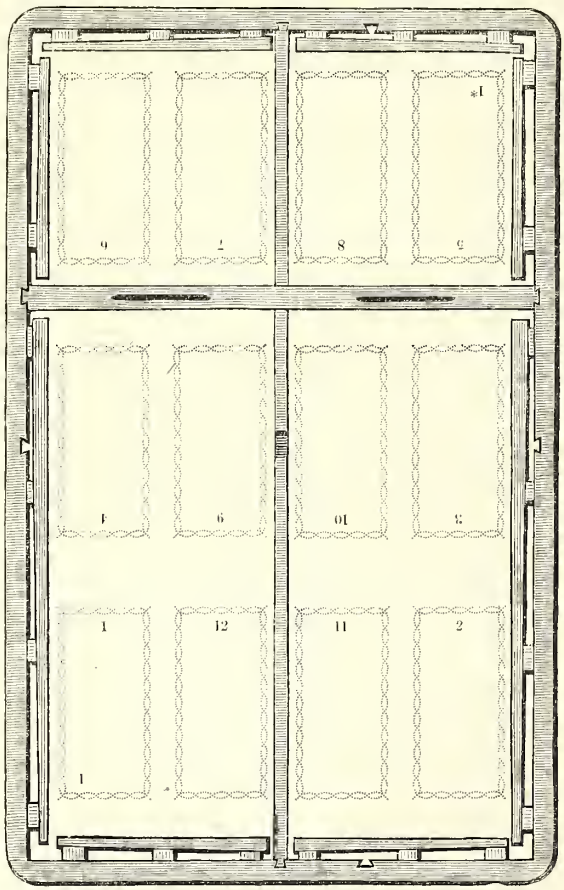
The Eighth Page.—The 16mo Completed.

The eighth page, backing 7, must be placed on the opposite side of the bar, foot to foot with 7, which brings it head to head with 1. Applying the same rule as in the completion of the 8vo, the form of 16s may now be filled up by placing 9 at the side of 8; 10 at the side of 7; 11 at the side of 6; 12 at the side of 5; 13 at the side of 4; 14 at the side of 3; 15 at the side of 2; and 16 at the side of 1, backs together. (See Diagram No. 4.)

Here you have, by examining the diagram, an illustration of the fundamental rule which applies in every form or in every section, whatever number of pages the form or section may contain; the first and last pages standing side by side, backs together; the second and next to the last; and so on. This law in relation to the position of the pages you can not impress upon



No. 4.—REGULAR FORM OF 16S—SHEET TURNS LENGTHWISE OF THE PAGES.



No. 5.—REGULAR FORM OF 12S—SHEET TURNING CROSSWISE OF THE PAGES.

your minds too firmly; because, though you may vary the imposition in other respects to suit the exigencies of the case, this is uncompromising, and, unless your form is obedient to it, it must be wrong. (See page 34.)

The Form of 12s.

This form is an exceptional one, and has usually been considered as belonging to a mongrel race. In some respects it is peculiar, yet in its imposition it is subject to the same general laws which govern other impositions. Having an odd number of pages in one direction, the application of those laws must be varied in some particulars to meet this peculiarity, which gives rise to the necessity of an inset.

Peculiarities of the 12mo.

The first variation from the construction of other forms, is the removal of the short cross from the center of the chase to a position about one-third the distance toward one end, leaving about two-thirds the length of the chase on one side of it, the long cross remaining in the center. Though when the sheet is folded up ready for insertion in the book, it contains but one section; yet,



(No. 7.)



(No. 8.)

in the process of folding, that section is subdivided and folded in two parts, which are placed one within the other to make the section complete. The main portion of the section, consisting of eight pages, occupies the larger division of the chase on one side of the short cross, and the inset, or subsection, the smaller division on the other.

The next variation is the necessity of turning the sheet in the direction of its width. Any simple form above the 4to *may* be imposed so that the sheet will turn and back correctly either way, though, as already stated, it is usual for convenience to turn it in the direction of its length.

The third and last variation is, that although when the form is completed the pages that face and back each other in each subdivision of the section, when folded up separately, occupy precisely the same relative positions as in simple forms, the pages do not follow in the imposition in consecutive order as in those forms. The inset occupying the middle place in the complete section, and being cut off from the main section after the sheet is printed, and folded up separately, in imposing the form we must omit from the middle of the main section as many pages as are contained in the inset or subsection, and lay the omitted pages in the smaller division of the chase, substituting in their place pages whose folios are increased by the number of which the inset consists, which in this form would be four.

The Margin of the Form.

In making up the margin of the form, the first step is, before removing the strings, to place the pages as nearly in their proper positions in the chase as possible. Take a sheet of the paper, or of the size of the paper on which the form is to be printed, fold it at the short cross, and measure from the inside or foot of the page next to that cross to the outside or foot of the outside page on the opposite side of that cross: the distance between these points should be just one-half the length of the sheet. Then fold the sheet again in the opposite direction, and apply the same process to the inside and outside pages on opposite sides of the long cross: the distance between these points should be just one-half the width of the sheet. In the 18mo form or 36s, the sheet should be folded into one-third instead of half its width, taking the measurement from the front of the outside page to the front of the second page from it, so as to include one front and one back margin. If the measurement is made from the page at the long cross to the outside of the form, it will include one front and two back margins, and the proper proportions between the two will not be maintained. Then adjust the pages of one-quarter of the form so that the head and back margin will be equal, and the front and foot margin equal, but rather more than the head and back margin. It is impossible to give any precise rules which will apply to all forms. Much depends upon fixing the size of the page to suit the paper before the pages come into the form. But in ordinary forms, say of 8vo or 12mo, with the usual margin, the difference between the head and foot margin should be about three-eighths of an inch; and the same difference between the front and back margin. This proportion should be increased or decreased as the amount of margin in the book is increased or decreased. This would place the page in the printed book a little nearer the head than the foot, and a little nearer the back than the front. The furniture may now be adjusted around the pages of this quarter and the strings removed; and if found, upon measurement again as before, to be correct, the same furniture may be placed around the pages of the other quarters. Since the introduction of metal furniture, the process of making margin is much simplified and facilitated by the ready adjustment of the different sized pieces. It is quite as well, and even more convenient after a little practice, to use a measuring rule instead of the sheet of paper, in adjusting the margin of forms.

Registering the Form.

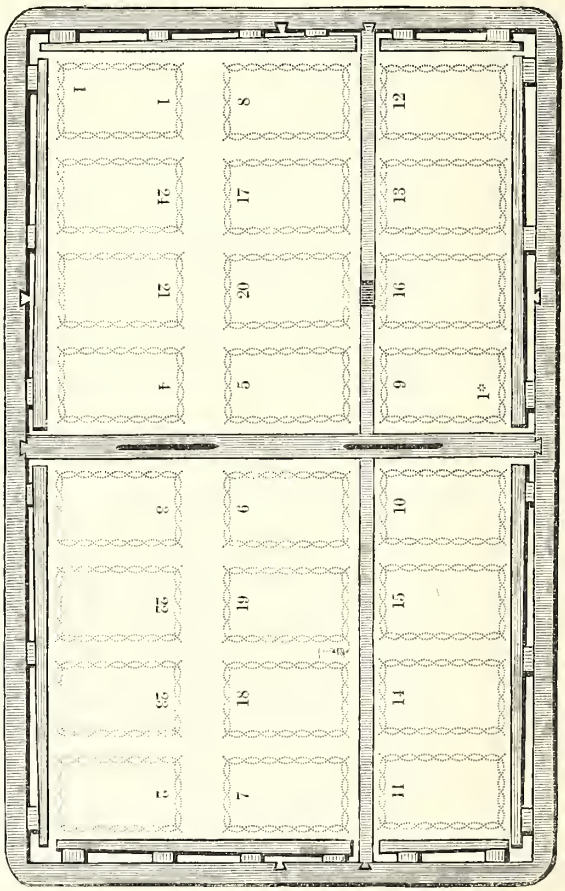
Having adjusted the margin of the form, and got it ready to lock up for press, it is the business of the one who sends it to press to see that it is properly registered; that is, that the pages are in a position in the form, that when the sheet is printed on both sides each page will back its proper page perfectly. This is not a difficult process where the compositor and maker-up have done their duty. It consists simply of careful locking up. But where you have, as sometimes happens, careless compositors on the work, the one who undertakes to send a form to press should be more than ordinarily careful.

A very small thing sometimes throws a form out of register, and destroys the beauty of the printed page. As, for example, spaces of a larger size than the type used; leads of unequal thickness; letters slipping by the leads at the end of the lines; lines spaced too tightly; the omission or addition of a lead at the foot of the page; or locking up one side of the form first. All these things are to be carefully looked after and guarded against.

The register of the form is perfect when not only the heads and sides range exactly, but when the lines of the pages also range exactly. Works printed on large type and widely leaded, especially, are defective unless this result is attained.

The composition of the pages may be perfect and yet not register on the press, unless the form is carefully and properly locked up. To lock up the form properly, you should begin by starting gently the quoins next the bars all around, then those next to them, and so on, until you reach the lower quoins, so that all parts of the form will be subject to equal pressure in every direction.

If one side or end of the form is locked tight before the other parts, the result will be that the bars will spring, the pages will be brought to their position in one direction and out of place in the other, and will consequently be all awry when the pressure is applied in the other direction. But, by the mode suggested, the pressure is first applied at the angles of the cross-bars, equally from the sides and ends of the chase, and is gradually brought outward toward the corners until it reaches the extremities of the form.



No. 6.—REGULAR FORM OF 24S.

HARPEL'S TYPOGRAPH.

8vo.

1	1	A	481	61	3 L
9	2	B	489	62	3 M
17	3	C	497	63	3 N
25	4	D	505	64	3 O
33	5	E	513	65	3 P
41	6	F	521	66	3 Q
49	7	G	529	67	3 R
57	8	H	537	68	3 S
65	9	I	545	69	3 T
73	10	K	553	70	3 U
81	11	L	561	71	3 V
89	12	M	569	72	3 W
97	13	N	577	73	3 X
105	14	O	585	74	3 Y
113	15	P	593	75	3 Z
121	16	Q	601	76	4 A
129	17	R	609	77	4 B
137	18	S	617	78	4 C
145	19	T	625	79	4 D
153	20	U	633	80	4 E
161	21	V	641	81	4 F
169	22	W	649	82	4 G
177	23	X	657	83	4 H
185	24	Y	665	84	4 I
193	25	Z	673	85	4 K
201	26	2 A	681	86	4 L
209	27	2 B	689	87	4 M
217	28	2 C	697	88	4 N
225	29	2 D	705	89	4 O
233	30	2 E	713	90	4 P
241	31	2 F	721	91	4 Q
249	32	2 G	729	92	4 R
257	33	2 H	737	93	4 S
265	34	2 I	745	94	4 T
273	35	2 K	753	95	4 U
281	36	2 L	761	96	4 V
289	37	2 M	769	97	4 W
297	38	2 N	777	98	4 X
305	39	2 O	785	99	4 Y
313	40	2 P	793	100	4 Z
321	41	2 Q	801	101	5 A
329	42	2 R	809	102	5 B
337	43	2 S	817	103	5 C
345	44	2 T	825	104	5 D
353	45	2 U	833	105	5 E
361	46	2 V	841	106	5 F
369	47	2 W	849	107	5 G
377	48	2 X	857	108	5 H
385	49	2 Y	865	109	5 I
393	50	2 Z	873	110	5 K
401	51	3 A	881	111	5 L
409	52	3 B	889	112	5 M
417	53	3 C	897	113	5 N
425	54	3 D	905	114	5 O
433	55	3 E	913	115	5 P
441	56	3 F	921	116	5 Q
449	57	3 G	929	117	5 R
457	58	3 H	937	118	5 S
465	59	3 I	945	119	5 T
473	60	3 K	953	120	5 U

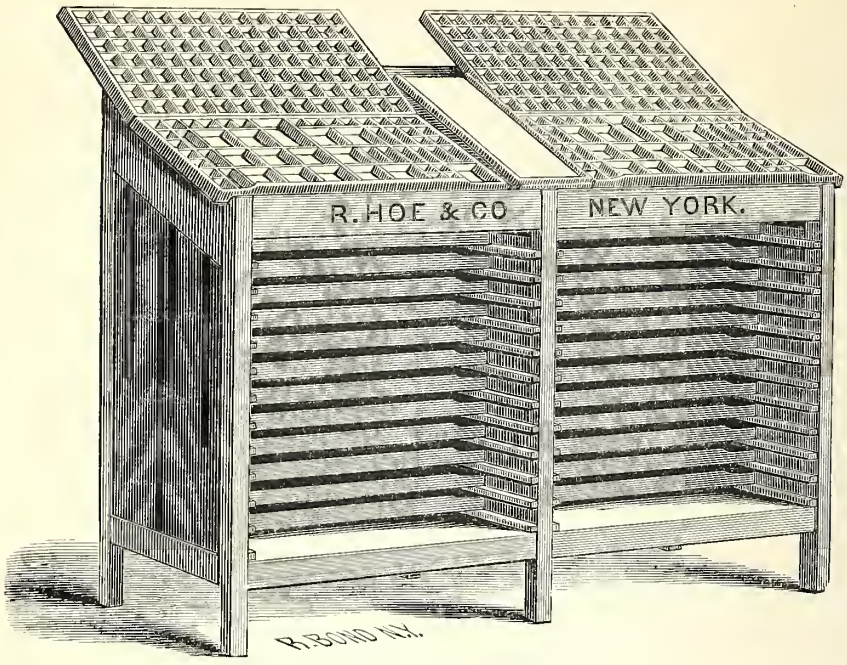
12mo and 18mo.

1	1	A	313	27	2 B	625	53	3 C
5	1*	A 2	317	27*	2 B 2	629	53*	3 C 2
13	2	B	325	28	2 C	637	54	3 D
17	2*	B 2	329	28*	2 C 2	641	54*	3 D 2
25	3	C	337	29	2 D	649	55	3 E
29	3*	C 2	341	29*	2 D 2	653	55*	3 E 2
37	4	D	349	30	2 E	661	56	3 F
41	4*	D 2	353	30*	2 E 2	665	56*	3 F 2
49	5	E	361	31	2 F	673	57	3 G
53	5*	E 2	365	31*	2 F 2	677	57*	3 G 2
61	6	F	373	32	2 G	685	58	3 H
65	6*	F 2	377	32*	2 G 2	689	58*	3 H 2
73	7	G	385	33	2 H	697	59	3 I
77	7*	G 2	389	33*	2 H 2	701	59*	3 I 2
85	8	H	397	34	2 I	709	60	3 K
89	8*	H 2	401	34*	2 I 2	713	60*	3 K 2
97	9	I	409	35	2 K	721	61	3 L
101	9*	I 2	413	35*	2 K 2	725	61*	3 L 2
109	10	K	421	36	2 L	733	62	3 M
113	10*	K 2	425	36*	2 L 2	737	62*	3 M 2
121	11	L	433	37	2 M	745	63	3 N
125	11*	L 2	437	37*	2 M 2	749	63*	3 N 2
133	12	M	445	38	2 N	757	64	3 O
137	12*	M 2	449	38*	2 N 2	761	64*	3 O 2
145	13	N	457	39	2 O	769	65	3 P
149	13*	N 2	461	39*	2 O 2	773	65*	3 P 2
157	14	O	469	40	2 P	781	66	3 Q
161	14*	O 2	473	40*	2 P 2	785	66*	3 Q 2
169	15	P	481	41	2 Q	793	67	3 R
173	15*	P 2	485	41*	2 Q 2	797	67*	3 R 2
181	16	Q	493	42	2 R	805	68	3 S
185	16*	Q 2	497	42*	2 R 2	809	68*	3 S 2
193	17	R	505	43	2 S	817	69	3 T
197	17*	R 2	509	43*	2 S 2	821	69*	3 T 2
205	18	S	517	44	2 T	829	70	3 U
209	18*	S 2	521	44*	2 T 2	833	70*	3 U 2
217	19	T	529	45	2 U	841	71	3 V
221	19*	T 2	533	45*	2 U 2	845	71*	3 V 2
229	20	U	541	46	2 V	853	72	3 W
233	20*	U 2	545	46*	2 V 2	857	72*	3 W 2
241	21	V	553	47	2 W	865	73	3 X
245	21*	V 2	557	47*	2 W 2	869	73*	3 X 2
253	22	W	565	48	2 X	877	74	3 Y
257	22*	W 2	569	48*	2 X 2	881	74*	3 Y 2
265	23	X	577	49	2 Y	889	75	3 Z
269	23*	X 2	581	49*	2 Y 2	893	75*	3 Z 2
277	24	Y	589	50	2 Z	901	76	4 A
281	24*	Y 2	593	50*	2 Z 2	905	76*	4 A 2
289	25	Z	601	51	3 A	913	77	4 B
293	25*	Z 2	605	51*	3 A 2	917	77*	4 B 2
301	26	2 A	613	52	3 B	925	78	4 C
305	26*	2 A 2	617	52*	3 B 2	929	78*	4 C 2

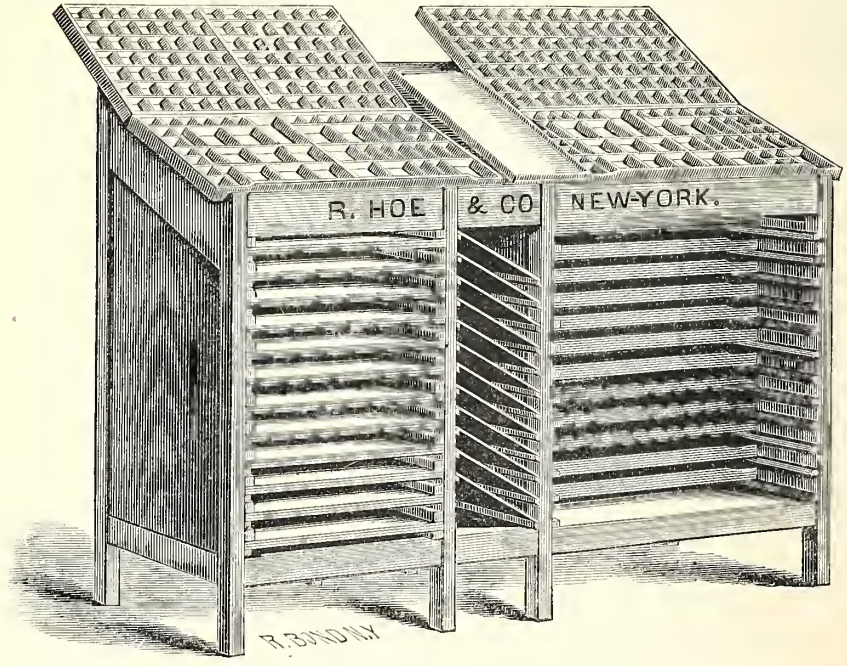
16mo.

1	1	A	433	19	T
9	1*		441	19*	
17	.....	A 2	449	.....	T 2
25	2	B	457	20	U
33	2*		465	20*	
41	.....	B 2	473	.....	U 2
49	3	C	481	21	V
57	3*		489	21*	
65	.....	C 2	497	.....	V 2
73	4	D	505	22	W
81	4*		513	22*	
89	.....	D 2	521	.....	W 2
97	5	E	529	23	X
105	5*		537	23*	
113	.....	E 2	545	.....	X 2
121	6	F	553	24	Y
129	6*		561	24*	
137	.....	F 2	569	.....	Y 2
145	7	G	577	25	Z
153	7*		585	25*	
161	.....	G 2	593	.....	Z 2
169	8	H	601	26	2 A
177	8*		609	26*	
185	.....	H 2	617	.....	2 A 2
193	9	I	625	27	2 B
201	9*		633	27*	
209	.....	I 2	641	.....	2 B 2
217	10	K	649	28	2 C
225	10*		657	28*	
233	.....	K 2	665	.....	2 C 2
241	11	L	673	29	2 D
249	11*		681	29*	
257	.....	L 2	689	.....	2 D 2
265	12	M	697	30	2 E
273	12*		705	30*	
281	.....	M 2	713	.....	2 E 2
289	13	N	721	31	2 F
297	13*		729	31*	
305	.....	N 2	737	.....	2 F 2
313	14	O	745	32	2 G
321	14*		753	32*	
329	.....	O 2	761	.....	2 G 2
337	15	P	769	33	2 H
345	15*		777	33*	
353	.....	P 2	785	.....	2 H 2
361	16	Q	793	34	2 I
369	16*		801	34*	
377	.....	Q 2	809	.....	2 I 2
385	17	R	817	35	2 K
393	17*		825	35*	
401	.....	R 2	833	.....	2 K 2
409	18	S	841	36	2 L
417	18*		849	36*	
425	.....	S 2	857	.....	2 L 2

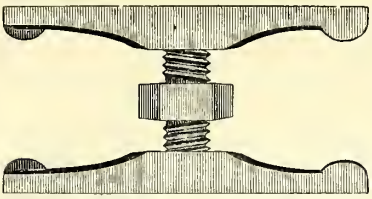
24mo.



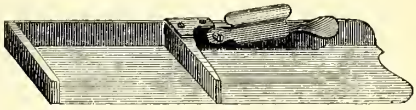
PATENT DOUBLE STAND OR CABINET, FOR TWO LENGTHS OF CASES AND GALLEY REST.



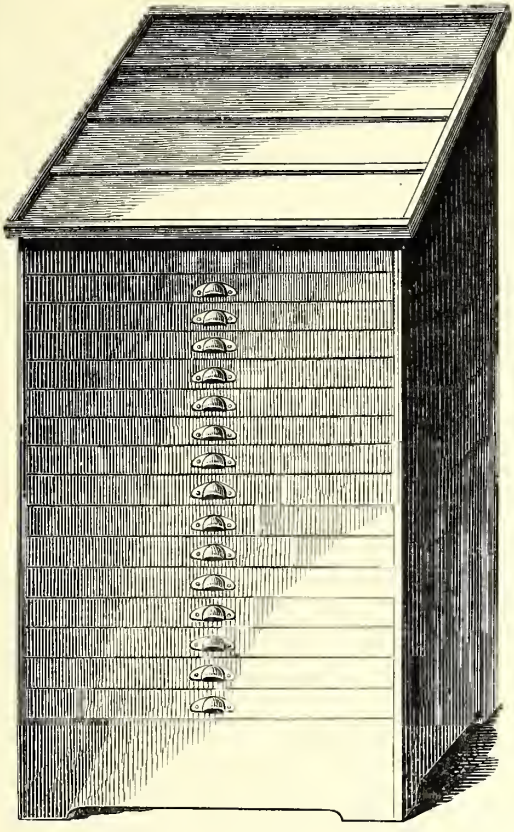
PATENT DOUBLE STAND OR CABINET, WITH GALLEY REST AND LETTER BOARDS.



MECHANICAL QUOIN.



CLASP COMPOSING STICK.



COMMON CABINET, WITH TWO-THIRD CASES AND GALLEY TOP.

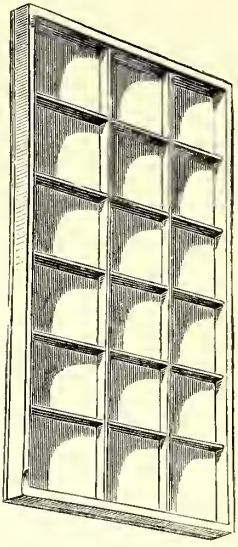
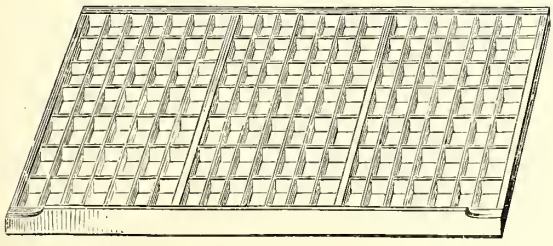
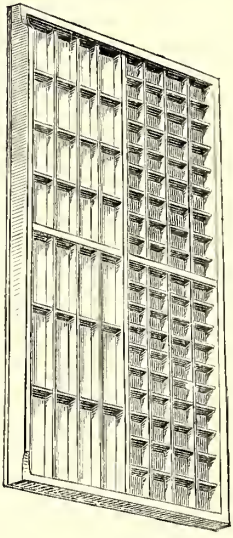


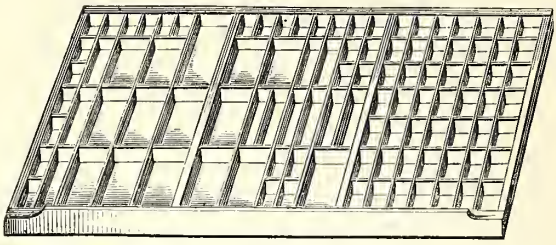
FIGURE OR "SORT" CASE.



TRIPPLE CASE.



LABOR SAVING RULE CASE.



AMERICAN JOB CASE, (OR UPPER AND LOWER TOGETHER)

*	†	‡	§	‖	¶	☞	℔	₱	@	%	℅	′	°
¼	½	¾	⅛	⅜	⅝	⅞	$	£	2-em	3-em	⁀	⁀	‾
⅓	⅔	&	Æ	Œ	æ	œ	–	1-em	2-em	3-em	Æ	Œ	&
A	B	C	D	E	F	G	A	B	C	D	E	F	G
H	I	K	L	M	N	O	H	I	K	L	M	N	O
P	Q	R	S	T	V	W	P	Q	R	S	T	V	W
X	Y	Z	J	U	]	)	x	y	z	j	u	Hair Space.	ffl

ARRANGEMENT OF AMERICAN UPPER CASE.

When upper cases are used for job letters points should be laid in first row of boxes above capitals, as follows: . , - ' ; : !'

ffi	fl	5-em space.	4-em space.	'	k	e	1	2	3	4	5	6	7	8
j / ?	b	c		d			i		s		f	g	ff	9
													fi	0
! / z	l	m		n		h	o		y	p	,	w	en-quad.	em-quad.
x / q	v	u		t		3-em space.	a		r		; / .	: / -	2- and 3 em quadrates.	

ARRANGEMENT OF AMERICAN LOWER CASE.

THE PRESS ROOM.

ALTHOUGH the work of the Press Department of a printing office is necessarily more mechanical in its operations than that of the Composing Room, its careful rendition entitles it, without doubt, to a large share of the honors attendant upon completed typography.

Critical and conscientious work-people; properly constructed press machinery; elastic, adhesive, even-faced and clean rollers; intelligently prepared and brilliant inks; paper or card stock of smooth surfaces, close texture, and moderately soft bodies; are all among the *positively necessary auxiliaries* wherewith to accomplish the results that gratify the lovers of elegant printing, and entitles typography to a place among the arts. On the other hand, a slovenly, heedless, unintelligent pressman, whose implements are to him matters of no particular concern, and who merely aims to get rid of his work without regard to its proper execution, is at best a mere time-server, with but little prospect of occupying a higher position.

PRINTING MACHINERY.

Presses of every kind, no matter how excellent, must be well set up and accurately adjusted. They must receive constant attention as to their cleanliness and repair, if the best performance is expected of them. They must be regularly and frequently oiled. Pure sperm oil, notwithstanding its expensiveness, is always to be preferred for presses. The best winter strained lard oil is also good when free from salt or acids of any kind. Crude, impure oils, containing animal or vegetable refuse, are not to be thought of. Patent "lubricators" may do well enough for coarse and unimportant machinery; but, before being employed on fine printing presses, they should be subjected to rigid investigation, as a majority of them are gummy and filthy after continued use, and some of them are positively injurious to machinery that must move constantly and rapidly.

ROLLERS.

A good roller is moderately soft to the touch, yet perfectly elastic and strong in texture. If made properly, it will shrink but little, and last a long time. But, washing rollers with strong lye; allowing them to be much exposed to the atmosphere when not at work; and other indifferent treatment, soon makes them useless; while their frequent renewal becomes a heavy item of expense.

It is an injurious practice to wash rollers too much. Nevertheless when it is necessary to clean them, it should be done thoroughly. Cam-

phene or benzine and a soft, well-washed sponge will accomplish this in an effectual manner, entirely detaching the oil and pigment of the ink if properly used. After washing with benzine, however, the face of the roller comes up better if it is well-wiped with another clean sponge containing a little water,—just sufficient to make the roller slightly wet during the operation. Remember, always, that strong alkaline washes soon destroy the face and suction of rollers if freely used in cleansing them.

Soft, thin ink left on rollers overnight, and having them carefully washed in the morning before working them, will preserve them longer in cold weather than if put away clean. Pans of water placed at the bottom of a closet containing rollers, are also conducive to their well-being.

When rollers become somewhat dry and skin-like upon the surface, from long use or from remaining out of use, they may be revived by being damped with a decoction made from once-used green tea-leaves, reboiled until the water assumes a greenish-russet hue. This should be kept in a bottle or other convenient clean vessel, and it will be found much better than water for damping rollers, causing them to retain their faces longer.

To know when a roller that has been recently made or washed is in order, grasp it gently with the hand, or pass the ends of the fingers along its surface lengthwise. If a raw, sticky condition is indicated, the roller is yet "green" and must not be put up. If it appears only moderately adhesive and pliant, but uniformly so, escaping from the fingers without showing a mark from them, and with a smooth rebound, the roller is "in order," and is best if mounted and charged with ink at once.

Different colors and qualities of printing inks require rollers in various conditions of adhesiveness or suction. Thus, soft, thin blacks, most yellows, siennas, greens, common reds, tints, and all those inks containing chromes, ochres, and other soft pigments, need fresher surfaced and more yielding rollers than strong, heavy blacks, blues, fine reds, and such as embody ingredients that produce a peculiar suction upon the face of a roller when they are applied to it, and which, consequently, keep it in good condition to work cleanly and well; whereas, if a soft roller were used for such strong inks, they would be pretty certain to deposite most of the coloring matter upon the distributing surfaces, that they should retain until it is required to cover the type. Some attention paid to the effects of various qualities of inks upon rollers of different conditions, will soon give the observant workman the intelligence whereby he may combine their uses to the greatest advantage.

ROLLER MAKING.

The weather, as well as a judicious selection of materials and implements to be used, has considerable to do with successful roller making, and no pressman may be called fully competent in his business who cannot, in almost any weather, make good rollers—the best of which are emphatically the cheapest.



(No. 9.) PUCK AND THE FAIRY.

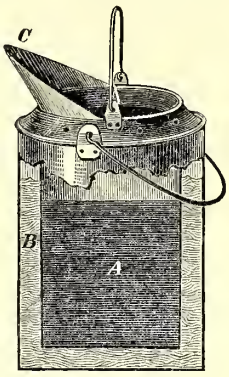
By permission—from Shakspeare's "Midsummer Night's Dream"—embellished with exquisite designs in Silhouette, by P. Konewka.—Roberts Brothers, Publishers, *Boston*.



(No. 10.) LAKE IN CENTRAL PARK, N. Y.

The best printers' rollers are now made almost entirely from glutinous and saccharine matters that readily combine under simple manipulation and form what is termed roller-composition. Although no great art is involved in producing this composition, yet a considerable amount of care and judgment is.

The kettle used in making roller-composition is in principle the same as an ordinary glue-kettle, only larger and deeper. The subjoined cut presents a correct view of a four-gallon kettle we have found well-adapted for the purpose mentioned. It is made entirely of sheet-copper, a material that will be found the cheapest to use.



TYPOGRAPH
COMPOSITION KETTLE.

A, boiler containing composition; B, showing water space between outer and inner boilers; C, long spout made somewhat angular, which is better for pouring than the short oval or round spouts usually made.

We now come to the preparation and application of

ROLLER-COMPOSITION,

and propose to lay before our readers some of the best methods known for making rollers of superior and uniform quality. The formulæ of the first three given have long been regarded by a few possessors of them as among the "great secrets" of the printing business, only to be made known to others for a valuable consideration and under the most confidential restrictions. As we are not obliged by any circumstance to continue the mystification, we present these methods to all who may wish to use them, assuring our friends at the same time that if they will adhere to the directions given, they will prove to be reliable and of considerable value.

Excellent Recipes for making Rollers.

No. 1.—*For Summer.*—2 ℔s. Cooper's No. 1 Glue; 2 ℔s. Baeder's Glue; 1 gallon best Sugar House Molasses; ½ pint Glycerine. *For Winter,* reduce each glue ¼ to ⅜ of a ℔.

Directions:—First soak the glues, wrapped up separately in woolen cloths, until the pieces bend easily without snapping, which will generally take from two and a half to three hours. Boil the molasses for forty-five or fifty minutes, and skim it thoroughly. Then put in the glues, drained of superfluous water. Boil the whole for fifteen or twenty minutes. At last put in the glycerine; and after three to five minutes boiling and stirring, pour off.

The above composition may be cut into small pieces from time to time, as rollers require renewal, and be remelted several times, adding a little good-bodied molasses each time.

No. 2.—*Strong Middle Weather Rollers.*—8½ ℔s. Cooper's best Glue; 2 gallons best Extra Syrup; 1 pint Glycerine; 2 ounces Venice Turpentine.

Directions:—Steep the glue in rain water until pliant, and drain it well. Then melt it over a moderate fire, but do not "cook" it. This will take from fifteen to twenty-five minutes. Next put in the syrup, and boil for about three-fourths of an hour, stirring it occasionally, and removing any impurities that arise upon the top of the composition. Add the other ingredients a few minutes before removing the boiler from the fire, and pour slowly.

N.B.—If the glycerine and turpentine are to be omitted, reduce the quantity of syrup one pint.

The above makes excellent strong rollers for fast printing when the thermometer ranges from 60° to 70°. Slightly reduce or increase the glue as the weather becomes colder or warmer.

No. 3.—10½ lbs. genuine Irish or Buffalo Glue; 2½ gallons Black Sugar House or best Maple Molasses; 1 lb. India-rubber Gum Shavings; 2 ounces Carolina Tar; 12 ounces Glycerine; 4 ounces strong Vinegar.

DIRECTIONS:—Soak glue over night, and drain in the morning by means of a *covered* collender. Boil molasses, and skim for twenty minutes. Add India-rubber chips, and stir until it combines with the molasses. Add glue, and boil for forty minutes, occasionally stirring the mass. Put in tar and glycerine, boil six or seven minutes, and pour.

This is the recipe for making the mysterious "Black Composition" so durable and elastic, and known to but very few persons until recently. If properly handled, it cannot be excelled, and contains every element required in a roller. Caution must be taken that only purified rubber gum is used. When this cannot be procured, add a pound and a half more glue, and four ounces more glycerine.

No. 4.—4½ lbs. White Shell or Bonnet Glue; ¾ gallon Strained Wild Honey; 1 quart Sugar House Molasses; 2 ounces Burgundy Pitch.

DIRECTIONS:—Soak glue twenty minutes, or until pliant, and drain, but keep from air. Boil honey and molasses three-quarters of an hour. Add glue and pitch, boiling half an hour longer. Stir the mass, and skim well during process.

A small quantity of this composition dropped on a board or iron plate will indicate when it is properly cooked. A shorter or longer time than is given above for boiling, as may be found sufficient or necessary, will sometimes happen. This makes a clear and durable roller.

We might add several other recipes known to be good; but those already given will be quite sufficient for all practical purposes.

In choosing glue for rollers, see that it is clear and bright in body and even in texture when held up to the light. It should break short, but only after considerable force is used, and with a clear, sharp edge, like glass. Spotted glue, or that which is clouded and specky, should be refused.

Roller cores, if made of wood, should be well scraped after being stripped, and bound with strong, loosely stranded twine, so that the composition may adhere well.

When pouring rollers in cold weather, it is best to have the moulds warmed, or at least stood where they will not be affected too severely by cold weather.

In drawing rollers, much trouble is sometimes experienced from the contraction of the molds or from imperfect greasing. If a mixture of pure sweet oil or melted butter and plumbago (such as electrotypers use) is freely used to grease the moulds, the rollers will draw easily.

Old rollers that are still elastic but surface-hardened, may be made as good as new at small expense by shaving off the tough parts to the depth of one-third of an inch, and, after placing them in the mould, pouring around them fresh composition made thoroughly hot. This practice is very common in some parts of Europe, where an entirely new roller is but seldom made.

Surplus composition should be poured into pans for future use; and, when required, remelted by itself after being cut into small pieces. Mixing new and old composition in the melting kettle is not good. Melt each separately.

When composition becomes tough and stringy from too much boiling, the addition of a little raw molasses, or some strong tea-leaf decoction

will generally reduce it sufficiently to pour well. Boiling glue and molasses together too much is apt to take the "life" away from both, as the the latter will candy, and the former become dry and leathery.

PRINTING INKS, ETC.

Black and colered inks, as well as the varnishes, and other preparations used for tempering, reducing, drying, and brightening them as needed, should be matters of grave consideration. Formerly it was considered a part of the knowledge of a complete pressman to understand how to mix the inks he used. But the manufacture of printing inks, etc., has now become a distinct branch of business, employing great chemical and other scientific intelligences. Without entering into all the minutiæ of ink making, we will give a brief list of some of the most important agents employed in doing so.

The ingredients of ordinary good printing inks,—except some of those containing analine coloring matter, in which are employed shellac, alcohol, turpentine, kreosote, glycerine, and other fugative agents,—are principally burnt linseed oil (called varnish), resinous matter, small quantities of soap, gum arabic, Venice turpentine, balsams fir and copaiba, and pure coloring matter. For blacks the universal pigment is lampblack, obtained from a variety of sources and in many degrees of fineness. Carbonized ivory, or bone-black, when sufficiently pure and fine, also answer well. The brown tinge that is found in lampblacks is neutralized by the use of Prussian-blue, indigo, etc.

Reds are made from carmines, vermillions, English and French imperial reds, red lead, Indian and Venitian reds, etc.

Blues are supplied by Prussian blue, indigo, Chinese blue, ultramarine, and some others.

Yellow is obtained from chromate and bichromate of lead,—otherwise called lemon and orange chrome,—yellow ochre, gamboge, etc.

Green is got from arseniate of copper, or by mixing blue and yellow.

Browns are produced by means of burnt sienna, umber, sepia, and the admixture of red and black.

The forming of other colors will be treated of hereafter.

In the choice of printing inks due regard should be paid not only to their depth of color and working qualities, but to their adaptability to the various kinds of paper, etc. to be printed with them. The grades of black inks now offered to printers by manufacturers are so numerous, and vary so much in quality and price, that it will require not only an experienced judgment in their selection as to quality, but some knowledge of their proper consistency and other necessary properties, according to price.

As a general rule, we have found that those inks which possess a bright, jet-black, satin-like lustre; that are soft and buttery to the touch, and deposite themselves upon the finger when they are touched softly and evenly, drawing from the main body only a short silky thread; that dry moderately fast; that distribute themselves smoothly and freely; that, when laid upon the type, print the edges and hair-lines sharply and cleanly, yet

yield an abundance of rich, glossy color; and, finally, that may be washed off from the rollers or form without hard rubbing; are always good and reliable, according to their grades, in every sort of weather.

Inks that possess dirty or gritty sediment; that are oily and offensive in odor; that are stringy or gummy; that print dirtily and cling tenaciously to everything they touch, yet dry very slowly; are to be guarded against and prevented from ever entering a press room if possible.

Inks that clog up type, and distribute badly over the rollers when the latter are in good order, and do not wash off readily from the forms by means of good potash ley, should always and at once be discarded.

In the more costly grades of black inks one would suppose that few or none of the defects noticeable in the common qualities should be found. But price does not always secure the best qualities in an ink, although the best ingredients and most careful labor may have been used to make an article that cannot be afforded for less money than is asked for it. Nevertheless, for the want of proper proportions, or the addition or absence of something, the ink may not print well. It is harsh and raw, or dreggy, or does not dry for a long time, and in all probability "sets off," which is the worst fault in the eyes of a painstaking and capable pressman.

A well-made ink will offset but little in ordinary cases. Very glossy, hard-surfaced papers or card-boards are liable to soil easily with most inks, unless preventatives are used, which we will name in another place. But really fine printing qualities cannot exist in any ink that smears and offsets on surfaces not highly polished.

A good way to ascertain the relative fineness and difference of color in black inks of various grades, when more extended experiments are not convenient, is to spread them quite thinly with a small palette-knife on the surface of a clean ink-stone, one against another, and then press a sheet of calendered paper upon them with the hand. Hang this up over night where the air can act upon the adhering inks, and the following morning will show very obviously their difference. These hints apply as well to colored inks.

Analine colors, which fade easily, should not be employed except on the most ephemeral work. They are very showy, but ought not to be used on important work intended for preservation.

MAKING FORMS READY FOR PRESS.

Before a form is put to press, a good impression of it should be taken, and, if there be cuts or lines of type that are low or meant to be much more conspicuous than others, they should be underlaid with strips of paper more or less thick, and the whole face of the form equalized for the work it has to do. This preparation belongs properly to the compositor, as his time is worth financially less than that of the pressman; but it is frequently left for the latter to do, and may be placed, in consequence, among the various responsibilities for him to attend to.

Unnecessarily heavy impression upon type should never be permitted a moment after it is discovered, for the abrasion caused upon the fine lines of

metal type, even for a short time, is ruinous to them, as well as unpleasant to the sight. We have seen lines of good type "pulled down" below their regular height fully the thickness of a stout card by negligence in this particular.

Heavy, broad-faced lines of type are always better if brought up by means of underlaying than by overlaying, as the former lifts them up so as to receive the full effect of the ink, whereas, in the latter case, they have to take their chances, for overlaying merely impresses upon the paper the inadequate supply of ink that such lines generally receive when not made slightly higher than the other lines.

TYMPANS.

The tympaning, or the substances that are placed between the iron impression cylinders or platens of presses, and the sheet that receives the impression from the type, are variously composed of fine broad cloth, felt cloth, layers of soft or hard paper, card-board, parchment, or a mixture of these articles. Solid book pages and masses of small type require the softer tympans; while, for open jobs, such as circulars, bill-headings, blanks, and other freely leaded work, paper tympans are the best, as they induce a sharper, and, at the same time, a more delicate impression. About seven or eight thicknesses of ordinarily sized book-paper, or four to six of letter-paper, is sufficient for most kinds of light forms. Blanks having much rule-work in them will require a sheet or two less if properly leveled, which may be done by placing two or three sheets of slightly damp, but thin and soft paper under them, and, after slightly loosening the quoins, planing down the form with care, afterward locking up a little tighter than at first. As soon as the paper underneath is dry, it will be found that the faces of the rules will have become more uniform in height, and the joints less visible when they are printed from.

Pressmen will find at times that solid borders, tints, etc., requiring a larger amount of ink and rolling than ordinary forms to cover them evenly, will not work well on some of the platen-presses now in general use, because of the inadequate means afforded by them for distributing the ink. The rollers passing over such tint-plates or border-lines are deprived of most of the ink contained upon them, and, when they return to the distributing disc or cylinder, only partially and imperfectly recover themselves with ink at those places where their circumferences have passed over solid lines lengthwise, when they must go over the same lines again; but, being marked by the old tracks, and having regained only a small coating of ink, they cannot deposit sufficient color upon these places, which consequently form a visible contrast with other portions of the form rolled at the same time, but not subject to the same conditions. The difficulty may be remedied to some extent by placing the border or other form in the chase diagonally or cornerwise,—not squarely as is usual,—thereby presenting angles that widen or diminish the marks made on the rollers, and thus avoiding the necessity to have the latter pass over the same track as they move to and fro.

SHADED WORK.

Shaded presswork, or lapping one color with another and finishing with bronze, is produced by shifting the guages to get the shade desired, using the same form or lines from it as many times as there are to be variations of shade. The lightest color is printed first. Thus, if orange, light blue, and black are to form the shades under the bronze, they should be printed in the order we have given them. When thoroughly dry, print with gold size to hold the bronze. When the bronze is to form an intermediate shade between inks, and a solid color is to complete the work, white size must be used, and dry powdered colors applied in the same manner as bronze. This produces an elegant effect if nicely done.

Only such inks as dry quickly and become hard should be used for shaded work, as much delay and trouble will occur from inks that dry slowly. It sometimes happens with the best inks, however, that spots will not dry in due season. By rubbing finely powdered soapstone with cotton wool over the work previous to bronzing, the defect will generally be removed.

As many persons suppose that the shaded printing herein described is produced by a new process, and is the invention and property of a party who vaunts a recent "patent" obtained for the same, we will state that it is neither a new nor a recent discovery. The writer hereof did such work and saw others do it twenty-two years ago, and he can point to others who practiced it long before that period, when it was considered public property and unpatentable. We consider it so still, notwithstanding the letters-patent said to be in possession of the party aforesaid. Has this "patent" ever been properly investigated? We think it has not.

PRINTING WITH COLORED FORMS.

Tinted grounds are usually printed first; but, when they are lined and in delicate tones, and the covering matter is in a strong color, they may be printed last with quite as good an effect as if done at first, provided the other color is perfectly dry.

When forms are to be printed in several colors, care must be taken that the same guages are used in printing the first section throughout, if the sheets are not pointed. Otherwise, more or less trouble and vexation may be expected, when the divided portions of the entire form are brought together, and exact register is necessary. Several impressions of each section of such work should be taken on common paper whereby to adjust those which follow, thus obviating the spoilage of good sheets.

In cases where a line must be printed in two colors to be made complete, or where letters are divided for two colors, the adjustments should be made with metal quadrates or furniture, and leads so placed that the pressman may shift them to make register if necessary.

☞ *In consequence of considerable additions made to our remarks not contemplated when we printed the specimen portion of this book, (which was done first,) we are compelled to continue them on page* 233.



COMPOSITION IN STIGMATYPIE.

BY M. FASOL, OF VIENNA.

Imported and kindly furnished by the BOSTON TYPE FOUNDRY, through its Managing Agent, JAMES A. ST. JOHN, Esq.—See "Closing Notes."

HARPEL'S

TYPOGRAPH;

OR,

BOOK OF SPECIMENS,

CONTAINING

USEFUL INFORMATION

AND A COLLECTION OF

EXAMPLES OF LETTERPRESS JOB PRINTING,

ARRANGED FOR THE ASSISTANCE OF

APPRENTICES, AMATEURS, MASTER PRINTERS, AND OTHERS,

BY

OSCAR H. HARPEL,

TYPOGRAPHIC DESIGNER AND PRINTER

CINCINNATI:

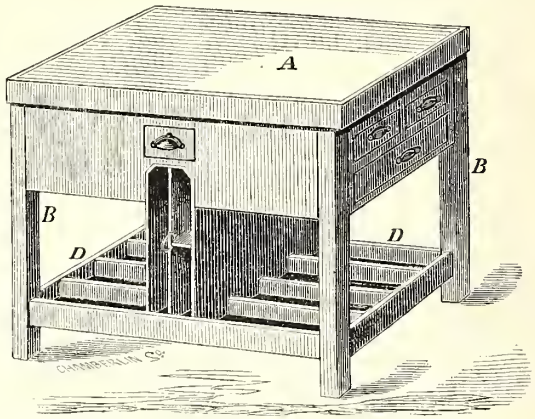
PUBLISHED AND PRINTED BY THE AUTHOR.

1870.

THE TYPOGRAPH IMPOSING STAND.

FOR JOB PRINTING OFFICES.

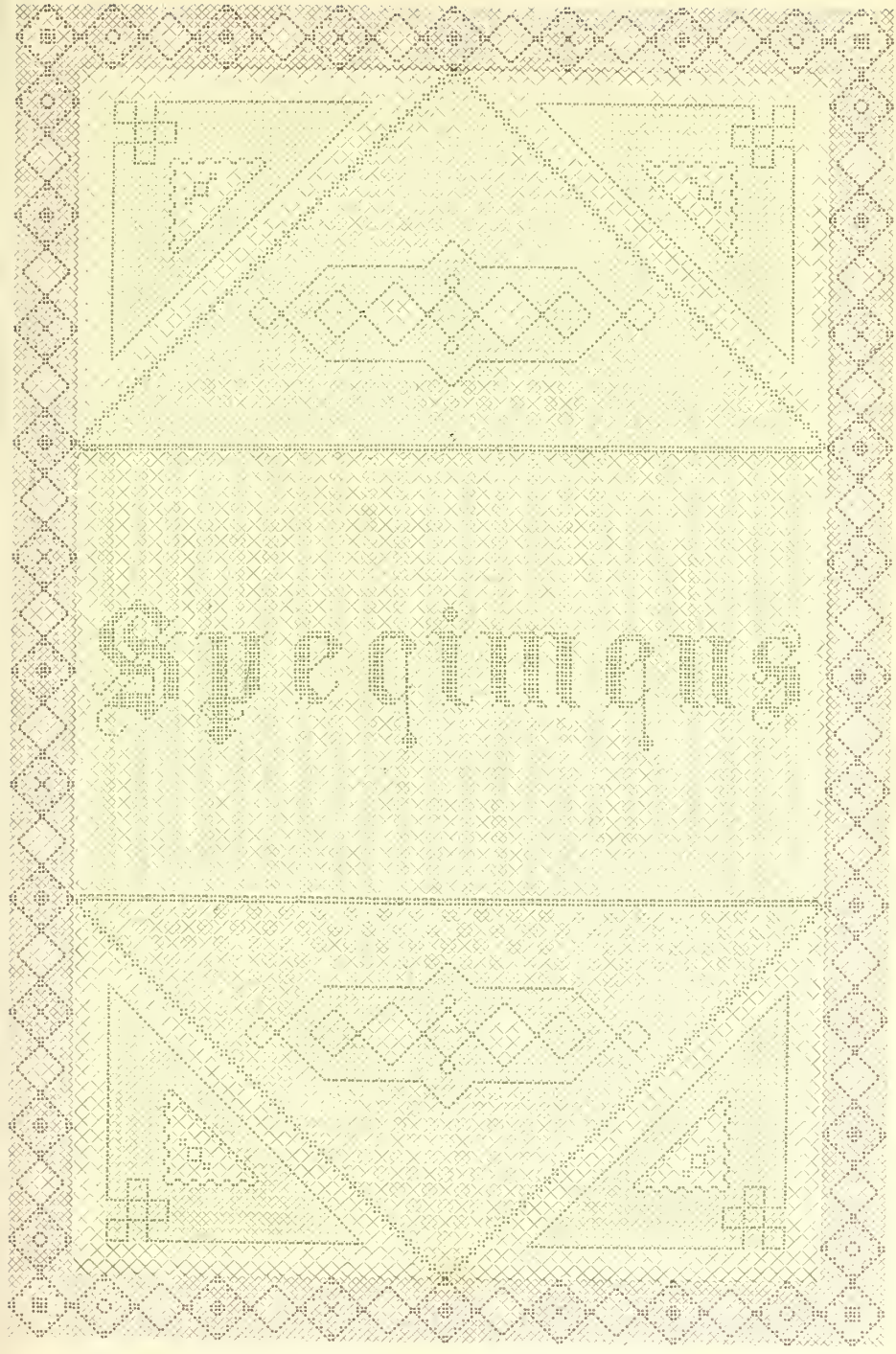
DESIGN PRESENTED TO THE CRAFT.



The above cut represents a convenient Imposing Stone and Stand for same, mentioned in page 9. Its general arrangement will be found advantageous in Job Offices where economy of room in close quarters is a matter of necessity.

EXPLANATION OF THE DIAGRAM:

A, marble or slate slab; B, B, frame of stand; C, chase-hole open from side to side and placed in centre of stand. It contains three appertures to accommodate chases of various sizes. The small drawer over the chase-hole is intended to contain iron side- and foot-sticks or chase-bars. D, D, are receptacles for straight furniture. The drawers placed at either end (at both ends is preferable) of the stand are for mallets, planers, shooting-sticks, quoins, squares, and other implements for locking up and adjusting forms.



COMPOSED BY MORT. A. READ, WITH OSCAR H. HARPEL, CINCINNATI.

RUSSET LEAVES.

BY

JAMES PUMMILL.



CINCINNATI:
HITCHCOCK & WALDEN.
NEW YORK:
CARLTON & LANAHAN.
1870.

From Printing Office of Methodist Book Concern—R. P. Thompson, Sup't.

THOS ROWLEY. W. WES. CHEW.

ROWLEY & CHEW

Steam-Power

PRACTICAL EXPERIENCED

GENERAL PRINTERS

ENTERPRISING ACCOMMODATING

CIRCULAR.

IN presenting this, our first circular, to the patrons of the late firms of Craig, Finley & Rowley, and Souder, the neat Printer, we respectfully ask a continuance of past favors. Our facilities and execution will be superior; and, as we are determined to build up a reputation for the finest work, we guarantee perfect satisfaction at our own risk.

Very Respectfully,
ROWLEY & CHEW.
July 1st, 1870.

Philadelphia:

14 & 16 S. SEVENTH ST.

OFFICE, SECOND STORY. DOOR ABOVE GAS OFFICE.



FORM 7.

Branch Office—24 West Fourth St. Cincinnati, O.—H. M. MAGILL, Gen'l Agent.

BRANCH OF THE

PHŒNIX INSURANCE CO.

OF HARTFORD, CONN.

Cincinnati, ... 187

Dear Sir:

The ***PHŒNIX, of Hartford,*** *has as yet no Agency at your place, and it occurs to us that there are many good risks that might be had if an Agent of the Company were located. We beg to know if your other duties are such as would justify you in soliciting and receiving applications for the* ***PHŒNIX*** *at your place—forwarding the same to this office for our examination. If approved, Policies will be issued here, and sent to you for collection and delivery. For your agency in the matter we will allow you* ***15 per cent. commission,*** *as well as the fees—Policy Fee, $1, Survey Fee, 50c.—the latter to be paid by the assured. If you should see fit to take hold of this matter, it will give us pleasure, upon being advised of the fact, to send you all necessary documents, instructions, rates, etc. by express, enabling you at once to vigorously put the agency in motion.*

The ***PHŒNIX Company*** *is too well known to need any praise at our hands, and from the Statements herewith printed, you will be able to see for yourself its financial position on the first day of January, 1870.*

Awaiting your reply, am

Yours, Very Respectfully,

H. M. Magill Gen'l Agt.

☞*An answer is respectfully requested.*

(G)

Ida S. Macdonald.

STEVENS & HUNTER,

NO. 1 MERRILL BLOCK, DETROIT, MICH.

Resident Agents of

THE PHŒNIX

INSURANCE COMPANY,

HARTFORD, CONN.

Total Losses Paid, Five Million Dollars.

M. KAPLAN,

DEALER IN

CLOTHING, DRY GOODS,

HATS, CAPS, BOOTS, SHOES,

Notions, Fancy Goods, Groceries, Trunks, etc.

LOVELAND, CLERMONT CO. O.

A Discount of 5 per cent. will be allowed on all Bills over $5 bought for Cash.

NOTICE!

FEBRUARY 12th, 1870,
5, P. M.

Your Returns for the month of January, 1870 have not yet been received at this office.

Do not delay another hour!

For .....

.....

.....

FROM

JAC. SMITH,

Merchant Tailor,

271 VINE STREET,

GENTLEMEN'S FURNISHING GOODS. CINCINNATI.

CIRCULAR.

Landaus,
Landauletts,
Clarence Coaches,
Summer Bretts,
Coupe Clarences,
Cincinati Clarences,
Six-seat Carriages,
OF ALL KINDS,
4-seat Rockaways,
6-seat Ext'nsn Tops,
4-seat Ext'nsn Tops,
Park Phatons,
Pacific Phatons,

We keep constantly on hand and offer for sale, at the **Lowest Market Prices**, all of the

LATEST STYLES

—OF—

CARRIAGES and BUGGIES,

Of our own Manufacture, of Selected Stock, at Wholesale and Retail.

HAVING greatly increased our facilities for manufacturing, by the introduction of Steam Power and the most improved machinery, we can offer as great inducements to buyers as any other house in the country.

WE ALSO BUILD

OMNIBUSSES and HOSE REELS.

We take great pleasure in showing our stock, whether you buy or not, and only ask you to call and examine for yourselves.

We would respectfully return our thanks for the liberal patronage bestowed on us for so many years, and hope, by prompt attention, to merit a continuance of the same.

Respectfully,

B. BRUCE & CO.

TO THE TRADE.

WE are prepared to fill all orders at **Wholesale Prices**, and are satisfied that our CARRIAGES will compete favorably, both in WORKMANSHIP, MATERIAL, and PRICE, to those manufactured in the Eastern market.

N. B.—If desired, we will send ILLUSTRATED CATALOGUE of all the very latest styles of CARRIAGES AND BUGGIES.

Jennie Linds,
Coal-Box Buggies,
OF ALL STYLES,
Tray Buggies,
Doctors' Phatons,
Germantowns,
Two-seat Wagons,
Cutters & Sleighs,
VERY LIGHT
Open Buggies,
OF ALL STYLES,
Family Carriages
And Buggies,
OF ALL
DESCRIPTIONS.

GEORGE MELDRUM,

Window Glass, Paints, Brushes, Painters' Materials, etc. etc.

No. 23 West Fourth Street,

Cincinnati, ... *187*

HARPEL,

PRINTER,

CINCINNATI, O.

A. HIRSCH,

LATE OF HIRSCH & SCALLAN,

The Boot Maker

161 RACE STREET,

2d door above 4th,

CINCINNATI.

Particular attention paid TO "STYLE."

"Red Stocking"

HEAD QUARTERS

AGENTS FOR

Geo. P. Prescott's

CELEBRATED

Smoking Tobaccos.

Kenton Insurance Company.



To the Representatives of the Company in Kentucky:

GENTLEMEN:—Hereafter, return of premiums for taxation will be made by this office to the Auditor of Public Accounts, at Frankfort, as required by the new Insurance Law of the State. The first statement thereof will be made by us in the month of May, or as soon as April returns from Agents are received here. The taxes we will also pay at Frankfort. Hereafter, therefore, you will make no statement of your premium receipts to the County Clerk as has been the custom, nor pay any State taxes whatever; all such duty, under the new Insurance Law, approved March 12, 1870, devolving upon us to perform. We are anxious in making our first exhibit at the State Capitol, to the newly created Insurance Bureau, to present as substantial a showing as possible; we therefore take the liberty of thus stating our wishes to you that business for the remaining portion of March, and April, may be prosecuted with a firm determination to accomplish desired results.

We are proud of the noble position this Company occupies in Kentucky, and its popularity with agents and the public, and nothing on our part shall be left undone to retain a continuance of your favor and the people's patronage.

Yours, Very Truly,

A. T. FORBES, Gen'l Agent.

Addy, Hull & Co.

COMMISSION MERCHANTS

— IN —

Pig Iron and Cotton,

Corner Vine and Water Sts. CINCINNATI.

SNIDER & McCALL,

PROPRIETORS OF

FRANKLIN AND FAIR GROVE PAPER MILLS,

DEALERS IN

BOOK, NEWS, AND WRAPPING,

AND PRINTERS' STOCK OF ALL KINDS,

Office, 230 & 232 Walnut Street,

CASH FOR RAGS. CINCINNATI, OHIO.

The 31st Financial Statement.

Cash on hand, in Bank, and due from Agents,	$174,973 91
United States Securities,	163,060 00
Loans on Approved Securities,	169,050 00
New York Bank Stocks,	90,250 00
Hartford Bank Stocks,	433,420 00
Miscellaneous Bank Stocks,	44,750 00
Bonds—State, City, Rail Road, and Water,	467,300 00
State Stocks—Ohio, Missouri, Tennessee, and Alabama,	132,085 00
Assets at Market Value,	*$1,674,888 91*

Total Liabilities, $46,572.83.

Hartford, Conn. January, 1870.

ASSETS: January 1st, 1869,	$1,467,835.60	ASSETS: January 1st, 1870,	$1,674,888.91
Unadjusted Losses,	131,970.62	Unadjusted Losses,	46,572.83
NET,	$1,335,864.98	NET,	$1,628,316.08

FIRE LOSSES PAID IN THE WEST AND SOUTH:

Ohio,	$283,298 40	Kentucky,	$153,421 39
Indiana,	148.513 63	Missouri,	204,428 55
Illinois,	437,105 03	Tennessee,	182,166 51
Michigan,	186,200 81	Mississippi,	157,425 61
Iowa,	142,625 76	Alabama,	79,778 90
Wisconsin,	177,764 78	Arkansas,	25,451 45
Minnesota,	90,736 04	Texas,	6,121 00
Kansas,	32,482 61	West Virginia,	2,000 00
Nebraska,	5,901 88	Colorado Territory,	128 21

TRIED IN THE FIRE AND FOUND FAITHFUL.

The PHŒNIX enters the New Year full of life and vigor, financial and physical, with the prestige of success in its favor, and a name and fame unsurpassed in the annals of Fire Insurance.

A. Ackerland & Co.
109 West Pearl St.
Lot.....
Size.....
Price.....
.....

A. Ackerland & Co.
109 West Pearl St.
Lot.....
Size.....
Price.....
.....

Kelly Island

CATAWBA.

VINTAGE OF 1864.

CINCINNATI.

COMPLIMENTARY.

Until December 31st, 1870,

WILL BE ALLOWED TO

Pass Free, on presenting this Ticket.

No.

Acting Pres. and Supt.

NASHVILLE.

Re-Union Exercises,

— OF THE —

Junior Class,

HUGHES HIGH SCHOOL,

Thursday, June 2, 1870.

1.—OVERTURE—*Two Pianos*—"Norma,"
Misses BERNSTEIN, LOEWENSTEIN, and PAPPENHEIMER, and Masters ROEDTER, GERSTLE, and BETTMAN.

2.—VOCAL DUET—"When Night comes o'er the Plain,"
Misses CONNOR and MULLEN.

3.—DECLAMATION—"Similia Similibus," . . . . R. ELLIOT.

4.—READING—"Don't Run into Debt," . . . . Miss SEYMOUR.

5.—PIANO SOLO—"Fra Diavolo," . . . . . Miss VORIS.

6.—DECLAMATION—"Speech of Cassius," . . . R. CARTER.

7.—READING—"Forty Years Ago," . . . . . Miss HALL.

8.—DUET—*Violin and Piano*—"Stradella,"
O. WILLIAMS and J. BETTMAN.

9.—DECLAMATION—"Speech of Spartacus," . . . E. NUNNECKER.

10.—VOCAL TRIO—"Zauberflœte,"
Misses MULLEN, OWENS, BERNSTEIN, and LOEWENSTEIN.

11.—READING—"Caudle Lecture," . . . . . Miss HOBBS.

12.—DECLAMATION—"Horatius at the Bridge," . . J. D. MCNEALE.

13.—VOCAL SOLO—"Sing, Smile, Slumber," . . . Miss SEYMOUR.

14.—READING—"The Raven," . . . . . Miss TATEM.

15.—DECLAMATION—"The War Inevitable," . . . . A. FISKE.

16.—VOCAL DUET—"Our Way Across the Sea,"
Miss OWENS and F. MCFARLAND.

17.—READING—"Why don't they? Why they don't" . Miss BRICKLEY.

18.—PIANO SOLO—"Cascade," . . . . . Miss BOERNSTEIN.

19.—READING—"Waiting at the Gate," . . . . . Miss BURT.

20.—DECLAMATION—"How they Brought the Good News from Ghent to Aix," . . . . . J. EBERSOLE.

21.—READING—"On the Banks of the Tennessee," . Miss SAWYER.

22.—VOCAL SOLO—"Leise, Leise!" . . . . Miss LOEWENSTEIN.

23.—READING—"Music for the Million," . . . . Miss CAREY.

24.—VOCAL DUET—"Norma," . Misses BERNSTEIN and LOEWENSTEIN.

PAREPA ROSA'S
BEAUTIFUL BIRD SONG
Published by LEE & WALKER, Philadelphia.



H. M. & W. P. PRATT,
DEALERS IN
DRY GOODS,
CLOTHING,
HATS, CAPS,
BOOTS, SHOES,
—AND—
NOTIONS,
Connersville, Ind.

MANUFACTURERS
—OF—
Custom Made Boots and Shoes.
A GOOD FIT WARRANTED.
Repairing Neatly Done.



Connersville Examiner Print.

JOHN M. TUDOR & Co.
Real Estate Brokers,
AND AUCTIONEERS,
No. 65 West Third St.
CINCINNATI.

AGENTS FOR DENNISON'S MARKING TAGS.

Cincinnati, ... 187

M.

Bought of SNIDER & McCALL,

PROPRIETORS OF

FRANKLIN AND FAIR CROVE PAPER MILLS,

AND WHOLESALE PAPER DEALERS,

Cash for Rags.

230 & 232 Walnut Street, East Side, bet. Fifth & Sixth.

HARPEL JOB PR CIN

60

HARPEL'S TYPOGRAPH.

TIME-TRIED. **PHŒNIX** FIRE-TESTED.

INSURANCE COMPANY, HARTFORD.



ASSETS:
$1,681,148.86

LOSSES PAID:
$5,000,000.00

Chamber of Commerce Agency—A. S. Reeves, Agt.

Inauguration

OF

CLIFTON HALL,

Monday, February 14th, 1870.

Cards of Admission must be exhibited at the Door, and are not Transferable.

MUSICAL

ENTERTAINMENT

In Behalf of the

Bethel Mission,

OF BROOKLYN,

Given under the Auspices and Direction of the

PHILADELPHIAN SOCIETY,

AT MOZART HALL,

Wednesday Evening, Aug. 10th, 1870.

CARDS OF ADMISSION, ONE DOLLAR.

Seats may be secured at T. WERLE'S Music Store, 69 York Street, or at the Box Office of the Hall, from 9 o'clock, a. m. until 4, p. m.

First Annual Party

OF THE

JOLLY YOUNG COMPANIONS,

Tuesday, June 14th, 1870,

— AT —

DODBEZOE'S WOODS.

Branch Phœnix Insurance Co. of Hartford.

Net Receipts at ..... Agency for the year 1869, returned for taxation, in pursuance of the requirements of Section 30, of the Insurance Law of Illinois, $.....

H. M. MAGILL,
General Agent.

OLD RELIABLE.

OLD RELIABLE.

GILLESPIE'S

Philadelphia

ICE CREAM DEPOT,

236 VINE STREET, ABOVE SIXTH, 236

CINCINNATI.

Cream always Fresh and made Daily. Delivered to families at 40 cts. per quart. A liberal deduction made to Church Festivals, Pic-Nics, Fairs, etc. etc.

Vine St. 236

Vine St. 236

Wedding Work.

Established 1818.



SHIPLEY & SMITH,

Card Engraving

AND

STATIONERY EMPORIUM,

No. 42 West Fourth Street, Cincinnati.

MONOGRAMS DESIGNED, ENGRAVED, AND PRINTED IN COLORS.

HARPEL JOB PR CIN.

Visiting Cards.

Office of

DIEBOLD & KIENZLE,

Successors to DIEBOLD, BAHMANN & CO.

Manufacturers of

FIRE AND BURGLAR SAFES,

—AND—

Patent Combination Bank Locks,

WM. R. WILSON,
Traveling Agent.

Cincinnati, ... *187*

(1)

1852. CLOSE OF THE 18TH FISCAL YEAR. 1870.

Agency at ..... *June 1st, 1870.*

D. M. Wynne, General Agent, Cincinnati:

No Policies or Renewals have been issued at this Agency for the **CLIFTON** *during the month of* **MAY**, *1870; nor is there any* **unreported** *business on the books of the Agency to May 31st, 1870. We have on hand to begin the 19th year—*

Policies, numbered from ..... *to* .....

Renewals, numbered from ..... *to* .....

Premiums, May, 1869, $ .....

Premiums, May, 1870, $ .....

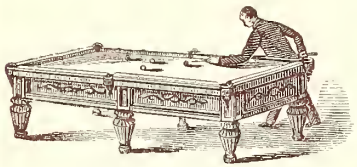
— 65 —

OR, BOOK OF SPECIMENS.

REED'S

GENUINE CREAM STOUT,

FOR INVALIDS.



Six of Julius Balke's Standard American Billiard Tables in use.

BEST BRANDS OF

Wines, Liquors, and Cigars,

CONSTANTLY ON HAND.

HENRY STRIETHORST
AND
GEO. KEMMETER,

Billiard Hall
AND
SALOON,

204 Vine Street, 206
UP STAIRS,
CINCINNATI, O.

HARPEL

DEPARTMENT
—FOR THE—
WESTERN AND SOUTHERN STATES
—AND—
TERRITORIES.

RATES REASONABLE.



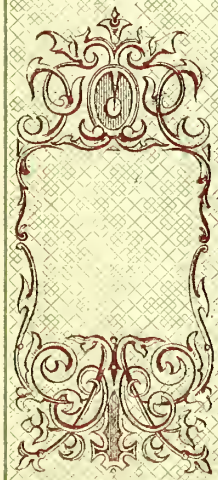
INSURANCE GENUINE.

Branch PHŒNIX Ins. Co. of Hartford,

CINCINNATI, OHIO.

E. P. Ireton, . . Adjuster.

THIS DIPLOMA



No. CINCINNATI, 1870.

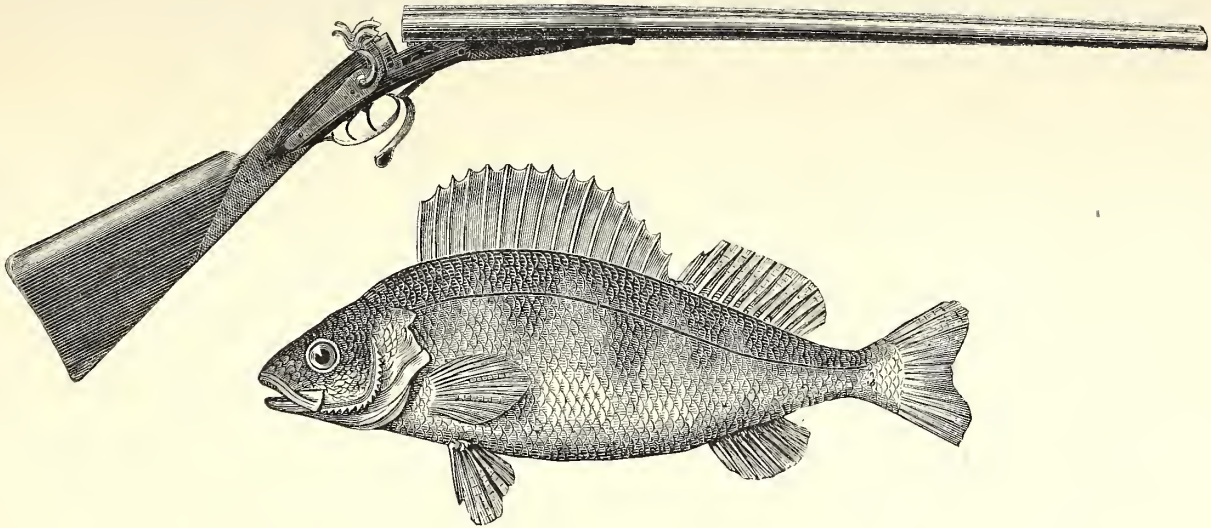
Gilmore, Dunlap & Company,

Pay to the order of Harpel

Dollars.

$

HARPEL, PRINTER,
58 West Fourth St.



EVERY DESCRIPTION OF

FISHING TACKLE, SEINES, NETS, ETC.

Illustrated Price List.



G. & F. SPICKER,

IMPORTERS OF

German Hardware

XL. I?

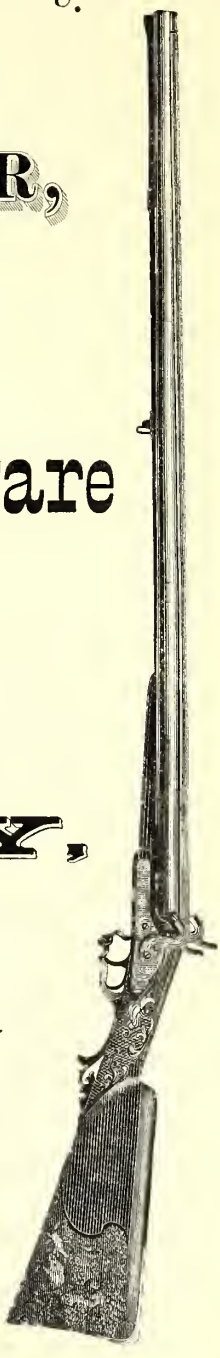
CUTLERY,

Shot Guns,

FISHING TACKLE, ETC.

123 Main Street,

CINCINNATI, OHIO.



(PROGRAMME.)

THE DEAD SHOT.

CAPT. CANNON,	Mr. Johnson.
MR. HECTOR TIMID,	" Dominick.
" WISEMAN,	" Malone.
" FREDERICK THORNTON,	" Withenbury.
LOUISA,	Miss Thompson.
CHATTER,	" Dominick.

ICI ON PARLE FRANÇAIS.

MAJ. REGULUS RATTAN,	Mr. Mendenhall.
VICTOR DUBOIS,	" Mitchell.
MR. SPRIGGINS,	" Craig.
MRS. SPRIGGINS,	Mrs. Burton.
ANGELINA,	Miss Tylor.
JULIA,	Mrs. Nixon.
ANNA MARIA,	" Mitchell.

Entertainment to commence at Eight o'clock.

SECOND COMPLIMENTARY PARTY

Given by the

Great Western

DANCING ASSOCIATION,

AT MECHANICS' INSTITUTE,

Thursday Evening, April 21st, 1870.

No Gentleman will be admitted without a Lady.

JAS. MURDOCK, JR.

MANUFACTURER OF EVERY VARIETY OF

CAST-STEEL AND BRASS

STAMPS, BURNING BRANDS, STENCILS,

BAGGAGE CHECKS,

ALSO SEAL PRESSES, CANCELING STAMPS, DOOR PLATES, POST-OFFICE STAMPS, METAL CARDS, MEDALS, BADGES, STEEL DIES, STENCIL TOOLS, INKS, BRUSHES, ALPHABETS, FIGURES, WAX STAMPS, EMBOSSED WORK, KEY TAGS, AND

BOOK-BINDERS' STAMPS,

139 *WEST 5TH ST., SEC. DOOR W. of RACE,* (Orders Solicited and Promptly Executed.) *CINCINNATI.*

Neat Stamps for Marking Printers' Cuts, Sticks, Chases, Galleys, etc. made to order.

BOUQUETS,

CUT FLOWERS,

—AND—

Floral Ornaments,

Gold and Silver Fish,

Aquarias,

Aquaria Plants, &c.

GREENHOUSE & BEDDING PLANTS,

SUCH AS

Camellias, Roses, Verbenas, Heliotropes, etc. Geraniums, etc.

1 BOX

HAY'S

SUPERIOR

Maple Candy,

GOOD FOR

COUGHS AND COLDS,

MADE FROM

Pure Maple Sugar,

No. 220 WALNUT STREET, EAST SIDE.

PRICE, 25 CENTS.

HARPEL BROS

SECOND COMPLIMENTARY PARTY

Given by the

Great Western

DANCING ASSOCIATION,

AT MECHANICS' INSTITUTE,

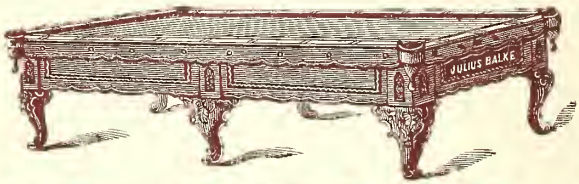
Thursday Evening, April 21st, 1870.

No Gentleman will be admitted without a Lady.

H. H. BRENEMAN. LEWIS VOIGHT.

CAMARGO MANUFACTURING CO.
MANUFACTURERS OF
PAPER HANGINGS
—AND—
Window Shades.
H. H. BRENEMAN & CO.
Proprietors,
57 West Fourth St. CINCINNATI, O.

JULIUS BALKE,
MANUFACTURER OF



STANDARD AMERICAN BILLIARD TABLES,
WITH THE
Celebrated Phelan & Collender Combination Cushions,
218 Market Street, ST. LOUIS, Mo.

JOS. W. GILBERT & CO.
Civil Engineers
—AND—
SURVEYORS,
N. E. Cor. Ninth and Walnut Sts.
CINCINNATI, O.
Special attention paid to the Survey of City Lots.

W. S. Sedam
P.O. Box 860
Cincinnati
Ohio

Double Distilled

BENZINE,

Prepared by

Wm. S. Merrell & Co.

WHOLESALE

DRUGGISTS

AND

Manufacturing Chemists,

112 WEST THIRD ST.

AND

11 Burnet Street,

CINCINNATI.

—o—

THIS ARTICLE IS INVALUABLE FOR REMOVING ALL KINDS OF GREASE SPOTS, ETC. FROM THE MOST DELICATE FABRICS, AND FOR CLEANING GLOVES WITHOUT AFFECTING THE COLOR.

IF NOT CALLED FOR IN TEN DAYS, PLEASE RETURN TO

JAS. SMITH,

MERCHANT TAILOR,

No. 127 Vine Street,

CINCINNATI.

CHAS. H. WATERS & CO.

Wholesale Dealers in

Wood and Willow Ware,

CORDAGE, TWINES,

Brooms, Brushes, Matches,

ETC.

CINCINNATI.

4 & 6 Main St. and 3 Public Landing.

MARMALADE.

Office of SNIDER & McCALL,

Wholesale Paper Dealers,

232 WALNUT STREET,

Cincinnati, April 20, 1870.

Dear Sir:

Having made other arrangements, I have severed my connection with the "Old House" and shall "cease my wanderings." I am very thankful for past kindness and favors, and hope you will not desert the old concern, and that you will favor my successor as you have favored me.

Yours, Respectfully,

LOU. M. ROSE.

Dear Sir:

Our Mr. ROSE having branched out for himself, we are left without our "old stand-by" but shall soon have another representative on the road, and in the meantime we trust we may have your orders as heretofore, and any goods you may want at any time in absence of our representative, shall, we assure you, have our careful and prompt attention.

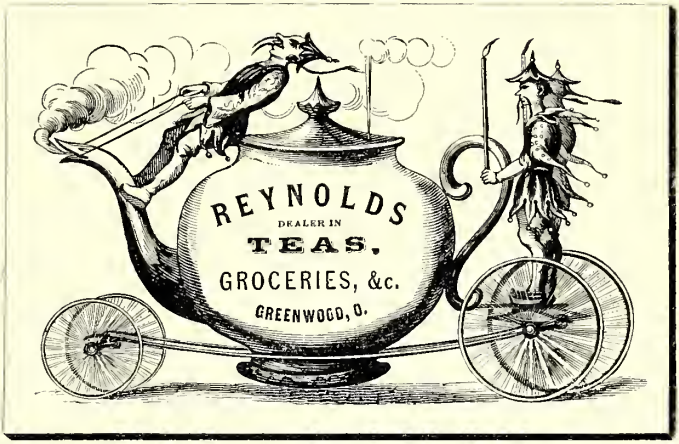
Yours, Respectfully,

SNIDER & McCALL.

Martin Y. Newcombe.

FROM
Duncans, Ford & Elder,
CINCINNATI, OHIO.

PHOTOGRAPHED
BY
Van Loo,
184
West Fourth Street,
CINCINNATI.



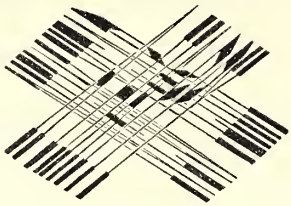
Hoover, Pumphrey & Co.

WHOLESALE

DRY GOODS,

94 Pearl Street, Cincinnati, O.

FROM
J. B. Bobe & Co.
JEWELERS,
N. W. CORNER
Cy & Elm Sts. Cincinnati.



January 1st, 1870.

Willard T. Fitzgerald and **Thos. P. Whetstone.**



FLAGS AND BADGES

For Decorations and Society Purposes,

FURNISHED BY

PHILIP NORMAND,

186 Schuylkill Street,

FRANK'S BLOCK, READING, PA.



Harry J. Norton.

Clifton, January 1st.

C. DIEBOLD. J. KIENZLE.

DIEBOLD & KIENZLE,

Manufacturers of

IMPROVED

FIRE AND BURGLAR PROOF

SAFES AND VAULTS,

—AND—

Combination Bank Locks,

Nos. 88, 90 & 92 Elm Street,

Between Second and Pearl Sts.

CINCINNATI, OHIO.

1870.

S. G. COBB'S

— Late Cobb & Davies,—

Catalogue of Plants,

ADAPTED TO THE

FLOWER BORDER AND WINDOW,

GROWN AT

LINDEN GROVE GARDENS,

COVINGTON, KY.

FLORAL AND SEED DEPOT,

No. 182 West Fourth Street,

CINCINNATI, O.

READ, PRINTER, 58 WEST FOURTH STREET, NEAR WALNUT.

—1870.—

THE GREAT FIRE IN VICKSBURG.

EQUAL TO ANY EMERGENCY.

THE following incident in the history of the PHŒNIX Insurance Company of Hartford, indicates emphatically its character and conduct in an emergency, which for extent and magnitude never had its parallel in the West or South. Vicksburg, Miss. on the nights of December 23d, 1866, and January 22d, 1867, was visited by conflagrations, which, in a very short time, destroyed over one hundred and fifty buildings and their costly contents, involving a loss largely exceeding One Million Dollars; the PHŒNIX had thirty-three policies "under fire," netting a loss of

— $81,647.11,—

which was paid as rapidly as our Adjusters could prepare proofs and draw drafts, thereby sustaining its well-earned reputation for prompt and honorable dealing, surpassed by no other Company in the annals of insurance.

It requires no $25,000 Deposit Law to make such a Company worthy of confidence.

P. Tracy & Co.

Wholesale and Retail

GROCERS,

118 & 120 Central Avenue,

P. TRACY.
M. MOCKLER.

CINCINNATI, O.

Mrs. J. Burnet Downton.

Mr. & Mrs. William Duncanson

Receive Friends,

Wednesday Evening, May 10th, at 8 o'clock.

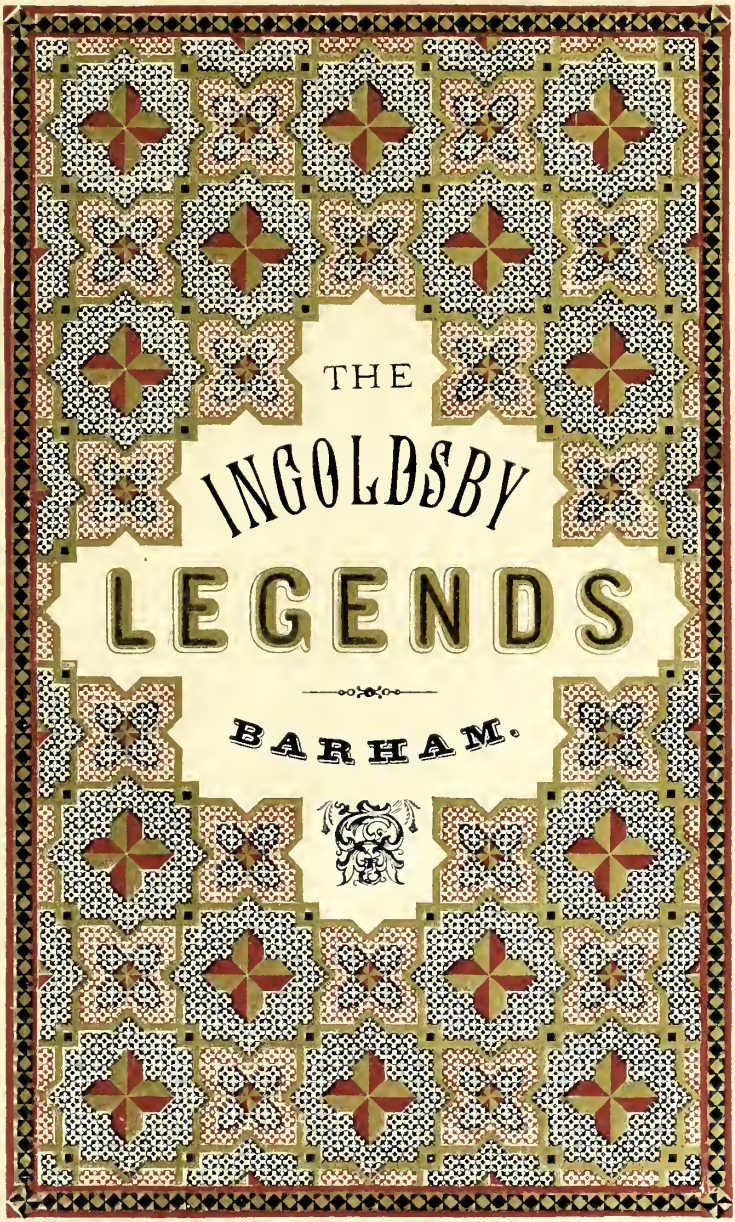
Mr. & Mrs. W. S. Morton,

At Home

Centreville,

Thursday Evening, Dec. 23d, 1869,

At half-past Eight o'clock.



BORDER DESIGNED AND FURNISHED BY MESSRS. SMITH & PORTER, GENERAL PRINTERS, BOSTON, MASS.

OR, BOOK OF SPECIMENS.

ANDES Insurance Company,

Cincinnati, O. *1870.*

118 WEST FOURTH STREET.

Commissioners & Corporators:

R. Buchanan,
A. D. Bullock,
Alfred Gaither,
Robert Mitchell,
Alexander Long,
Joseph C. Butler,
Sam'l. M. Murphy,
H. A. V. Post,
Augustus Wessel,
C. W. Moulton,
J. B. Bennett.

CAPITAL STOCK: ONE MILLION DOLLARS.

Received of .....

DOLLARS,

being for .....

STAMP.

$ 100

Chairman Committee on Organization.

JNO. REESE, Pharmaceutist,

Druggist, Chemist,

VOLATILE
RHEUMATIC LINIMENT.

DIRECTIONS.—Apply the Liniment on Flannel, to the affected part, twice a day, rubbing it in well with a piece of dry Flannel.

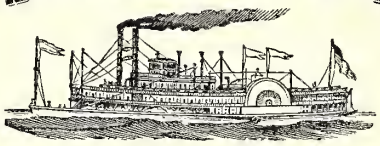
South Charleston, Ohio.

THE CELEBRATED
PICKLED MANGOES
Put up by MRS. WILLIS, Logan, Ky.

(x)

W. S. BROWN. P. CLEARY.

W. S. BROWN & CO.



Steamboat Agents,

No. 20 Public Landing,

CINCINNATI.

MIAMI PAINT WORKS,

745 Central Avenue,

CINCINNATI.

BLACK.

This Paint is carefully mixed and ready for Family or General Purposes, but should be kept corked when not in use, to exclude the air.

LITTLE MIAMI, COL. & XENIA, and MARIETTA & CINCINNATI R. R.

COMPLIMENTARY.

RAILROAD PASS.

No...... *Loveland, O.*.....*1870.*

Permission is hereby given to THE BEARER, and all his friends, to travel from any Station on the L. M., C. & X. and M. & C. R. R. or from any part of Clermont, Warren, and Hamilton Counties, on foot, to the OLD-ESTABLISHED NEW YORK STORE of

M. KAPLAN,

to see the bargains he is now offering in all kinds of goods for Ladies' and Gentlemen's wear.

NOT TRANSFERABLE.

☞GOOD UNTIL USED.☜

GEORGE MELDRUM.

CALIFORNIA

Water Proof

BLACKING

OR,

Oil Polish,

Manufactured by

JNO. DERR,

29 Montgomery Street, San Francisco.

R.	R.	R.	R.
Lot.....	Lot.....	Lot.....	Lot.....
Size.....	Size **35**	Size **40**	Size **45**

Mr. & Mrs. Joel Witmor.



Pauline Thompson.

Henry C. Hammond. Helen A. Richards.



At the residence of Mr. & Mrs. G. Richards,

Tuesday Evening, May 3d, 1870,

At eight o' clock.

HONEY MADE FROM BUCKWHEAT BLOOM,

COMBS FREE OF BEE-BREAD AND ALL IMPURITIES.

☞ *Open at this side so as not to injure the Comb.* ☜

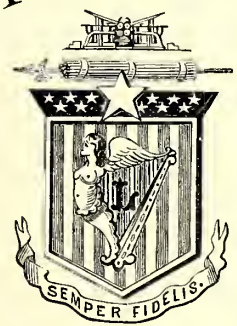
From LEBANON, [Shaker Village,] O.

Sold by WILLIAM W. TOWNLEY, Agent,

PITTSBURGH, PA.

FROM

HARPEL,



"THE"

PRINTER,

58 West Fourth Street,

CINCINNATI.

If not delivered within Five Days after reaching destination,
Postmaster will please return.

Thomas MacKellar, Esq.

606-614 Sansom Street,

Philadelphia.

Supreme Court of Ohio.

GEORGE DAVIDSON
AND
JOEL DRAKE,
vs.
THE STATE OF OHIO.

Error to Court of Common Pleas of Hamilton County.

THOMAS POWELL, *Attorney for Plaintiffs in Error.*

A WRIT OF ERROR was allowed in this cause in vacation returnable before the Supreme Court.

The defendants below were indicted by the Grand Jury of Hamilton County. The indictment contains two counts. The first for keeping a room to be occupied for gambling, etc.; and he second for keeping and exhibiting apparatus and devices wherewith to play at games of chance to win and gain money.

A "*nolle prosequi*" was entered to the first count as follows:

"And on the same 10th day of July, in the said term of June, A. D. 1869, of said Court, *nolle prosequi* entered herein, by order of Court, as to the first count of the indictment, at the request of the Prosecuting Attorney."

See Record page 6.

The defendants plead to the second count of the indictment as follows:

"And afterwards, to-wit: on the 10th day of July, in said term of June, A. D. 1869, of said Court, this day came the Prosecuting Attorney on behalf of the State of Ohio. The defendants coming into Court, and being arraigned upon said indictment for pleas thereto, say they are guilty as charged in the second count of the indictment, and not in the first, which said plea is accepted by the Prosecuting Attorney."

See Record, pages 5 & 6.

MRS. FRENCH

Respectfully announces to her customers and the general public that she is now receiving

Direct from Cincinnati,

A Fresh and Elegant Assortment of

MILLINERY

AND

FANCY GOODS!

Which she will be pleased to show to all who may favor her with a visit. The latest Styles of

Hats, Ribbons, Flowers, Feathers, Laces, Collars, Cuffs,

And many other articles of Ladies' Wear will be found at her store, in great variety, and at

VERY REASONABLE PRICES.

Please give her a Call.

South Side Public Square,

DANVILLE, ILLS.

PREPARED ONLY BY
Wm. L. Hasbrouck,
DRUGGIST AND CHEMIST,
N. E. Corner York and Baymiller Sts.
CINCINNATI.

HASBROUCK'S
Inula Troches,
PURELY VEGETABLE,
A pleasant and effectual remedy for
ASTHMA, HOARSENESS, COUGHS,
COLDS, CROUP, CATARRH,
And the various affections of the Lungs and Throat.

DIRECTIONS:
Take from one to three every hour as required.
Children five years old one-half Troche.

WARRANTED
Free from Cubebs, Opium, Antimony, or any disagreeable or deleterious drug.

Harpel, Printer, Cin.

SUPERIOR
Cough Balsam.
DIRECTIONS:
ADULT, 1 teaspoonful; a CHILD 5 years old, one-third teaspoonful; a CHILD one year old, 10 drops.
Prepared only by
WM. L. HASBROUCK,
DRUGGIST & CHEMIST,
North-East Corner York and Baymiller Streets,
CINCINNATI, OHIO.

WM. L. HASBROUCK, Druggist and Chemist,
No. .....
Dr. .....
N. E. Corner York and Baymiller Streets, Cincinnati.

ELDERTON'S
CATARRH
SNUFF
PRICE,
FIFTY CENTS

WM. L. HASBROUCK, Druggist & Chemist,
No. .....
Dr. .....
N. E. Cor. York & Baymiller Sts. Cincinnati.

H. L. ZINSHEIMER'S
BEST
PLASTER
For all kinds of
Wounds, Burns, Bruises & Cuts,
34 David St.
CINCINNATI, O.

J. WELTER'S

VINE STREET

Cheap Boot AND Shoe Store,

529 VINE STREET,

Corner Vine and 15th, *Cincinnati, O.*

QUEEN CITY PRINTING INK COMPANY,

TRADE



MARK.

DeGOLYER & RYCHEN, Proprietors,

600 West Fifth Street, Cincinnati.

.... *Lbs.* .... *Ink,* ..... *per lb.*

MELDRUM, SAGE & CO.,

WINDOW GLASS, PAINTS, BRUSHES, PAINTERS' MATERIALS, ETC.

No. 23 West Fourth Street,

Cincinnati, ... 187

HARPEL'S TYPOGRAPH.



Primary and Preparatory School,

264 Race St. between Sixth and Seventh,

Cincinnati, ____ *187* .

Dr. to MISS S. R. STEER,

For Tuition in ____ *Department,* $ ____

Received Payment,

TERMS PER SESSION.

Preparatory Department, $45.00
Primary Department, . 35.00

No deductions for Absence.

All Bills are due October 1st and February 1st.

TERMS, CASH WITHOUT DISCOUNT.

Cincinnati, 187

M

Bought of WM. S. MERRELL & CO.

Manufacturing Chemists and Wholesale Dealers in

Drugs and Medicines, French, English and American Chemicals,

NO. 112 WEST THIRD STREET.

Linseed, Lard & Coal
OILS,
ALCOHOL,
White Lead & Turpentine,
NET CASH,
Or subject to Sight Draft in 10 days.

All claims for deductions must be made within five days after receipt of the goods. Should any damage or loss occur after shipment of goods, the purchaser must look to the Transportation Company for payment, and not to us.

26

Harpel's Typograph;

25 CENT REVENUE STAMP.

For Value Received, ... ,

of ..... do hereby assign and transfer to

..... of ..... ,

..... Shares of the Stock of the **Andes Insurance Company,**

of Cincinnati, Ohio, specified in the within Certificate, and appoint and confirm

..... , of ..... , Attorn ,

to transfer the same to the said party on the Books of the Company, and fully ratify

all that the said Attorn do , the same as if done by in person.

Witness, hand and seal , this day of A.D.18 .....

In presence of .....

— 93 —

GOOD FOR
One Regular Meal
CENTRAL RESTAURANT,
216 Vine St.
John G. Trinkner.

Duncans, Ford & Elder.

GOOD FOR
One Regular Meal
CENTRAL RESTAURANT,
216 Vine St.
John G. Trinkner.

or, Book of Specimens.

(SUMMONS.)

THE STATE OF OHIO, } ss.
HAMILTON COUNTY.

TO ANY CONSTABLE OF CINCINNATI TOWNSHIP, GREETING:

You are hereby commanded to SUMMON

to appear before me ***GEO. W. CORMANY,*** *a Justice of the Peace in and for said Township and County, at my office therein, on the* ..... *day of* ..... *18* ....., *at* ..... *o'clock,* ..... *M.*

To answer unto

.....

who claim of the defendant in a Civil Action, the sum of $ ..... *for* .....

.....

You will make due return of this Summons.

Given under my hand and seal, this ..... *day of* ..... *A. D. 18*

GEO. W. CORMANY,
Justice of the Peace.

— 94 —

Harpel's Typograph;

GEO. W. CORMANY,

Justice of the Peace.

OFFICE:

S. E. Cor. Ninth Street and Central Avenue.

SUMMONS.

Docket . . . *No.* . . . .

Returnable *18*

. . . . . .

. . . . . .

vs.

. . . . . .

. . . . . .

. . . . . .

Plaintiff will take judgment if you fail to appear.

for . . . . $

Justice's Fees, ...

Constables' Fees, ...

(A TRUE COPY.)

Constable.

C. H. Thousson,
WITH
JULIUS BALKE,
Billiard Manufacturer,
Cincinnati, O.

EDWIN DU LAURANS,
GENERAL AGENT FOR
Brilliant Printing Inks,
Manufactured by J. K. WRIGHT & CO. 2321 Vine Street,
PHILADELPHIA, PA.

REMEMBER!

THAT

Rev. M. Pope Neaman,

PASTOR OF THE FIRST BAPTIST CHURCH,

Will deliver a Sermon at 11 o'clock, a. m. and 7, p. m.

SUNDAY.

YOUR ATTENDANCE IS RESPECTFULLY SOLICITED.

PRAYER MEETING EVERY WEDNESDAY.

YOUNG MEN'S PRAYER MEETING EVERY FRIDAY EVENING.

HARPEL'S TYPOGRAPH;

LOUIS RIPKA,

MANUFACTURER OF

Nonsuch Cottonades

AND

SUPER LONG CLOTHS,

Lower Five Mills,

Represented by R. S. WILEY. MANYUNK, Pa.

JOHN GATES,

Importer and Dealer in

French Brandies,

WINES, CORDIALS, &c.

58 Greenwich Street,

THOS. BELDEN, Agent. NEW YORK.

SMOKE.

I WATCH the gossamer wreaths that rise
From the fragrant folds of my good cigar,
And dream of the Cuban isle that lies
Ever embraced by the seas afar,
Where the palm-trees cast their shadows long,
'Neath the cloudless blue of the tropic skies,
And the Creole señoritas throng
To gladden the eve with their starry eyes.

I dream of a damsel whose orbs of jet
Once fettered my heart with their mystic power,
And woke a feeling that lingers yet,
As I sit and smoke in the twilight hour.
Ah, me, how often mid orange groves
We wandered away in that vernal land—
Unto paths where elfish Cupid roves—
With the perfumed blossoms on either hand.

'T was there her fingers so deftly formed
The delicate cigarettas for me,
And hers was the glance that flashed and warmed
With its fire the passion it would not see.
And free of fancy she rambled so,
Till the groves were laden with globes of gold,
In that Spanish island all aglow
With its sunny memories manifold.

And then I sought for Inez again,
Resolved to tell her the story of love—
I waited from eight o'clock till ten,
Like a lone, disconsolate turtle-dove:
But she came no more as in the past,
To strengthen the tie that her absence broke,
So I lit a mild cigar at last,
To solace the hopes that ended in——smoke!

O. H. H.

ADAM B. ROBBINS,

(Late of ROBBINS & POSEY, Cincinnati,)

Manufacturer of and Dealer in

BOOTS & SHOES,

16 High Street,

Webster Buildings, BOSTON.



PHŒNIX INSURANCE COMPANY, HARTFORD, CONN.

(FORM 16.)

TRANSFER OF AGENCY.

Branch, Cincinnati, ... *187*

..... *Esq.*

Please hand all Phœnix Books and Documents now in your possession, to ..... *our duly authorized Surveyor for your town and vicinity, whose receipt for same will be binding on*

Yours, Respectfully,

K. W. Magill & Co'ys.

Cincinnati, ... 187

Proprietor of the Fine Brands,
NEW ORLEANS CLUB
AND
Crescent City.

Bought of **John C. Davis,**

"THE CIGARIST,"

Importer and Wholesale Dealer in Fine Cigars and Tobacco,

166 VINE STREET, ABOVE FOURTH.

100

HARPEL'S TYPOGRAPH;

Louis Snider. John McCall.

MANUFACTURERS' WAREHOUSE.

SNIDER & McCALL,

WHOLESALE

Paper Dealers,

Nos. 230 & 232 WALNUT STREET,

CINCINNATI, O.

Cincinnati, *187*

Dear Sir:

We take pleasure in informing you that our **MR. R. R. REID** *will call upon you on or about the ..... inst.*

Appreciating the favor of your trade, and desirous of continuing it, we trust you will withhold your orders for any goods in our line until his arrival.

Yours, Truly,

SNIDER & McCALL.

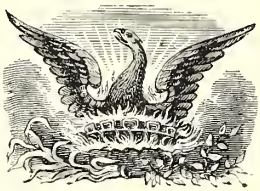
PRICE LIST.

JULY 1st, 1870.

PHŒNIX

WHITE LEAD WORKS,

[Established 1837.]



Eckstein, Hills & Co.

PROPRIETORS,

Corroders and Manufacturers of

Pure White Lead,

CINCINNATI, O.

OFFICE, No. 171 Race Street,

FACTORY, West Eighth Street.

HARLAN'S

HARNESS GREASE,

For Keeping Exposed Leather Waterproof, Smooth, and Pliable.

Manufactured and Sold by JOHN M. LUERS, Newport, Kentucky.

Quotations Net, and subject to fluctuations of the market.

TERMS CASH WITHOUT DISCOUNT.

	Kegs of 25, 50, 100, 200 & 350 pounds, & upwards.	25 lb. tin pails in Cases of 100 pounds.
	CENTS.	CENTS.
White Lead in Oil.		
ECKSTEIN, HILLS & Co.'s "PHŒNIX" BRAND, (perfectly pure,)	11½	12
We also prepare the following Brands of White Lead, which for whiteness, body, and durability, are unequaled by any in the market at corresponding prices:		
LAWRENCE & Co.'s "PURE,"	10½	11
" " "SUPERIOR,"	9½	10
" " "IMPERIAL,"	8½	9
" " "COLUMBIA,"	8	8½
" " "OHIO,"	7½	8
" " "CHALLENGE,"	6½	7
(An advance of ½c. per lb. on orders less than one [1] ton.)		
Zinc White, in Oil.		
GENUINE FRENCH ZINC WHITE,	12½	13
PARLOR,	11	11½
IMPERIAL,	10	10½
Dry White Lead.		
PURE WHITE LEAD, in bbls.	11	
In boxes of 25 and 50 lbs. full weight.	11½	
Pure Red Lead.		
In bbls. ½ bbls. and 200 lb kegs,	10	
in boxes of 25 and 50 lbs. full weight,	10½	
(An advance of 1c. per lb. on all orders for less than 500 lbs.)		

PRESERVED

English Cherries,

PUT UP BY CANNING FRUIT CO. NEWARK.

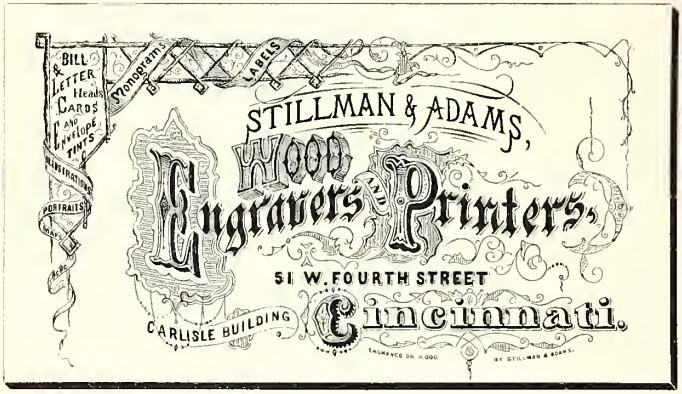
Second Soiree Dansante,

AT ODD FELLOWS HALL,

Thursday Evening, February 17th, 1870.

HEIDEL'S BAND.

The Floor will be called at 8½ o'clock, precisely.



FROM ENGRAVINGS ON WOOD BY STILLMAN & ADAMS, CINCINNATI.



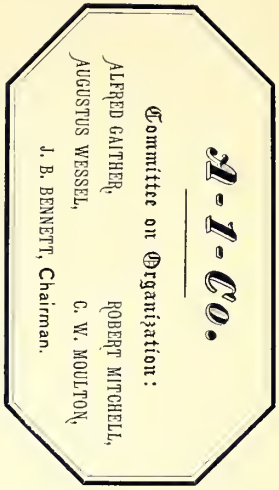
Gilmore, Dunlap & Co.

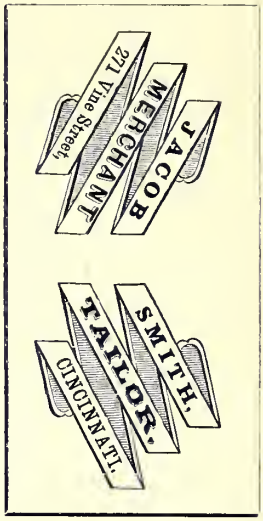
DEPOSITED BY

Cincinnati, ... *187*

Checks on Banks in this City deposited with us *after Half-past One o'clock*, CANNOT BE COLLECTED UNTIL THE ENSUING DAY, and are taken at the risk of the Depositors until collected.

	DOLLARS.	CENTS.
Notes, ...		
Specie, ...		
Check, ...		
"		
"		
"		
"		
"		
"		
"		
"		







J. G. RIKHOFF,

MERCHANT TAILOR

60 West Fourth Street,

CINCINNATI.

BOND & BIDDLE,

Importers and Jobbers of Teas,

N. E. Corner Front and Chestnut Streets,

L. Montgomery Bond,
J. Milton Biddle. } Philadelphia.

Presented by WM. F. COOPER.

GREAT WESTERN DANCING CLUB,

At Parker's New Grove, Monday, July 4th, 1870.

Committee of Arrangements:

C. ESBERGER,	J. DREHER,	V. SAEGER,
TH. LETZLER,	G. FROEHLICH,	M. STEINAUER.

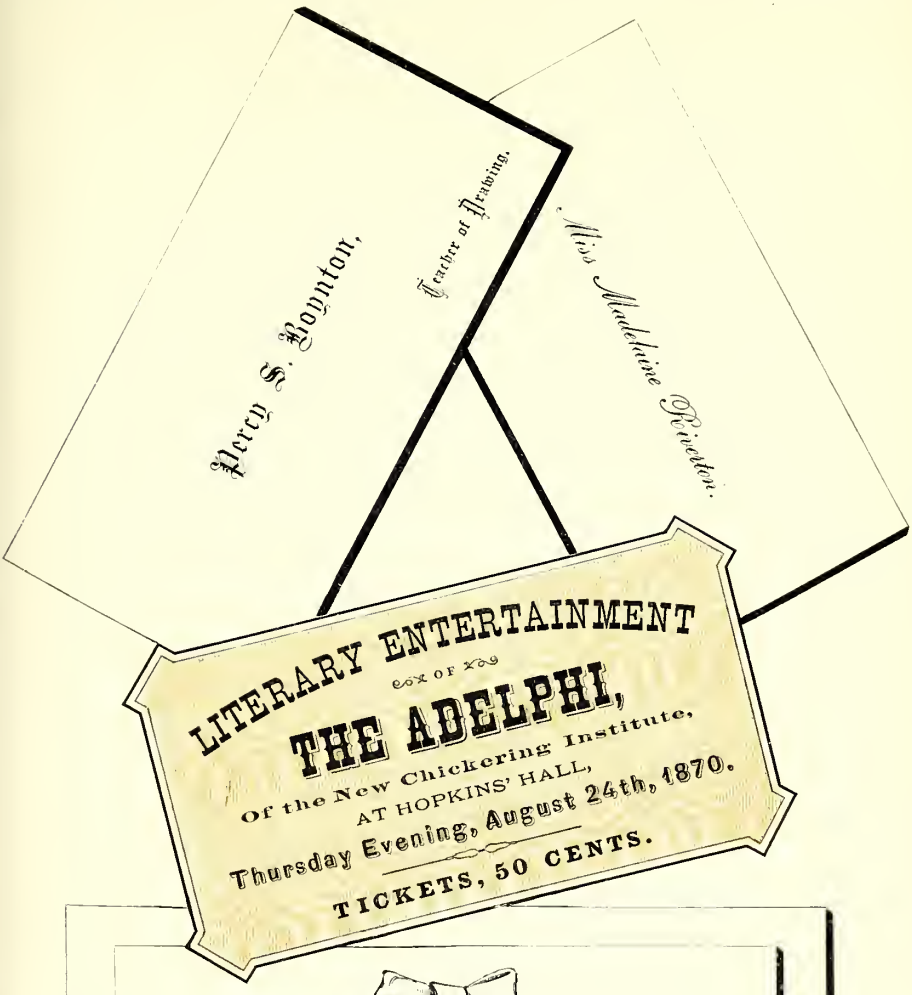
MANAGERS:

G. THIEL,	W. R. SMITH,	J. MANNE,
G. STUTZMAN,	WM. VOLL,	A. VOLL,
C. W. ADAMS,	THOS. COUGHLIN,	G. LONG,
C. HEEG,	CHAS. SMITH,	WM. COOK,
J. ESSEL,	C. HESLE,	C. WUEST.

L. HEIL, Chief. G. ZIMMER, Ass't Chief.

SCHWEBEL'S BAND.

SECOND GRAND ANNIVERSARY PIC NIC.


Percy S. Boynton,
Teacher of Drawing.
Miss Madeleine Preston.
LITERARY ENTERTAINMENT
GIVEN BY THE
THE ADELPHI,
Of the New Chickering Institute,
AT HOPKINS' HALL,
Thursday Evening, August 24th, 1870.
TICKETS, 50 CENTS.


Miss Leda Clifford.
Mr. & Mrs. John Lee.

AN ACCOUNT

OF THE

Remarkable Occurrences

IN THE LIFE AND TRAVELS

OF

COL. JAMES SMITH,

DURING HIS CAPTIVITY WITH THE INDIANS, IN THE YEARS

1755, '56, '57, '58, & '59.

With an Appendix of Illustrative Notes.

BY WM. M. DARLINGTON,

OF PITTSBURGH.

CINCINNATI:

ROBERT CLARKE AND COMPANY.

1870.

SPRING GROVE

CEMETERY:

ITS

History and Improvements,

WITH

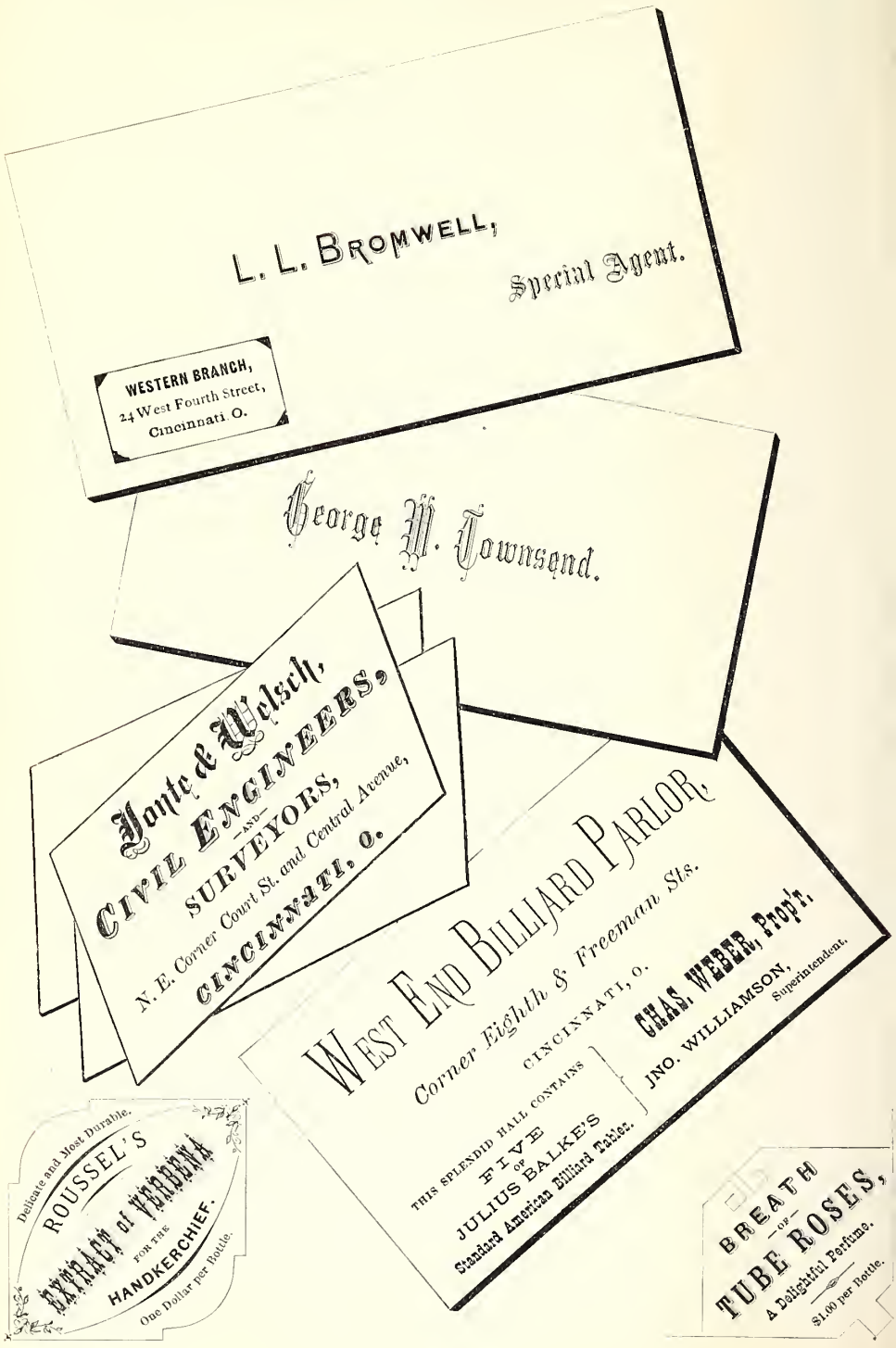
Observations on Ancient and Modern

PLACES OF SEPULTURE.

CINCINNATI:

ROBERT CLARKE AND COMPANY.

1869.


L. L. BROMWELL,
Special Agent.
WESTERN BRANCH,
24 West Fourth Street,
Cincinnati, O.
George W. Townsend.
Yonte & Welch,
CIVIL ENGINEERS,
AND
SURVEYORS,
N. E. Corner Court St. and Central Avenue,
CINCINNATI, O.
WEST END BILLIARD PARLOR,
Corner Eighth & Freeman Sts.
CINCINNATI, O.
THIS SPLENDID HALL CONTAINS
FIVE
OF
JULIUS BALKE'S
Standard American Billiard Tables.
CHAS. WEBER, Prop'r.
JNO. WILLIAMSON,
Superintendent.
Delicate and Most Durable.
ROUSSEL'S
EXTRACT of VERBENA
FOR THE
HANDKERCHIEF.
One Dollar per Bottle.
BREATH
OF
TUBE ROSES,
A Delightful Perfume.
$1.00 per Bottle.

ADDY, HULL & Co.

COTTON FACTORS

AND

Commission Merchants,

Cor. Vine and Water Sts. CINCINNATI.

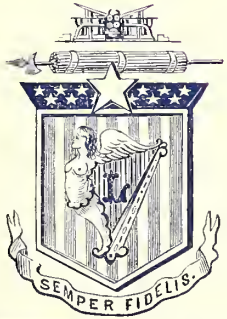
CASH ADVANCES ON CONSIGNMENTS.

For the protection of Shippers, our Open Policy of Insurance covers Property consigned to us from any part of the U. S. by all the usual Routes and Conveyances.

Orders for Groceries, Provisions, and Plantation Supplies, Promptly Filled.

The Best Mercantile, Card, and General Printing of every Description.

The Finest Assortment of Material in the City.



CINCINNATI, 187

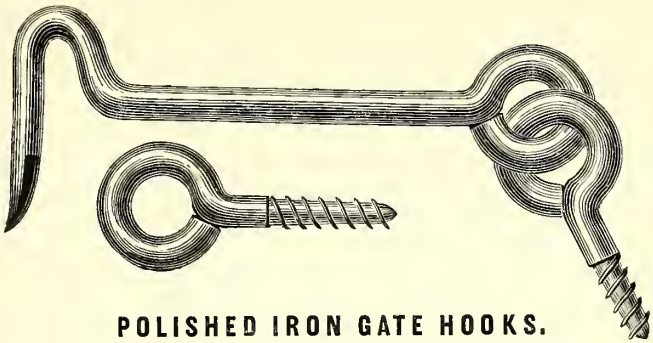
To Harpel, "The Printer,"

58 WEST FOURTH STREET,

North Side, between Walnut and Vine, over Grover and Baker's Sewing Machine Store.

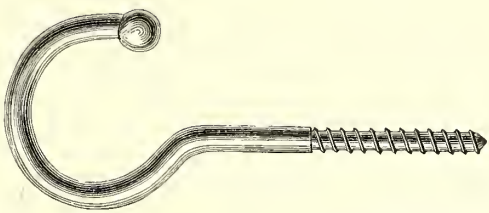
112

HARPEL'S TYPOGRAPH;



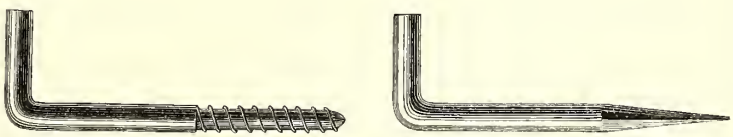
POLISHED IRON GATE HOOKS.

	2½	3	3½	4	4½	5	5½	6 in.
Per gross, . . .	$2.90	3.10	3.40	3.70	4.00	4.50	560	5.50



POLISHED IRON WARDROBE HOOKS.

	1	1¼	1½	1¾	2	2½	3 in.
Without Knob, . *per gross,*	$1.00	1.10	1.20	1.30	1.40	1.50	1.60
With " . . "	1.30	1.40	1.50	1.60	1.70	1.80	1.90



POLISHED IRON SCREW OR DRIVE HOOKS.

	1	1¼	1½	1¾	2	2¼	2½ in.
Per gross, ...	35	40	45	50	55	65	75 cts.

SURVEYORS' AGENCY DEPARTMENT.

G. Ernst Grams,

—WITH—

PHŒNIX INSURANCE COMPANY,

Hartford, Conn.

Branch Office—No. 24 West Fourth Street,

CINCINNATI.

415 Vine Street, between Ninth and Tenth.

Red Stocking Head Quarters. { Fred. Waterman. Louis Ballenberg.

FRED. WATERMAN & CO.

DEALERS IN

Fine Cigars and Tobacco,

No. 273 VINE STREET,

Wholesale and Retail. CINCINNATI, OHIO.

Agents for Geo. P. Prescott's Celebrated Smoking Tobacco.

DIAMOND INK.—The Best and Cheapest

PRINTERS' INK

IN USE.

Manufactured by DIAMOND INK COMPANY, PITTSBURGH, Pa.

Works, Corner First Avenue and Ferry Street,

B. F. H. LYNN, Gen'l Agent.

SYRUP
— OF —
Bromide of Chloral,

For the Immediate Relief of

Headache, Neuralgia, Nervousness, Sleeplessness, Epilepsy, Delirium Tremens, and all Diseases of the Nerves.

DIRECTIONS:

In case of Violent Headache, take a tablespoonful in a little water; If no relief is experienced in one hour repeat the dose. In case of Sleeplessness, take two tablespoonsful on retiring. In case of Epilepsy and Chronic Affections of the Nerves, a tablespoonful three times a day will be sufficient. In case of Delirium Tremens, give tablespoonful at once, and repeat if not relieved in one-half hour.

PREPARED BY
W. H. ADDERLEY,
Apothecary,
N. E. COR. SIXTH AND MOUND STREETS,
Cincinnati.

PHŒNIX INS. COMPANY, HARTFORD, CONN.
Thos. F. Spear,
— BRANCH OFFICE—No. 24 West Fourth Street, —
CINCINNATI, OHIO.



Cincinnati, ... *1870.*

RECEIVED FROM **Duncans, Ford & Elder,**

in good order by .....

to be delivered at .....

in like good order and condition to .....

Marked: .....

ARTICLES.	WEIGHT.



INVITATION TO RECEPTION—DOTTED LINE ACROSS CENTRE INDICATES THE FOLD.

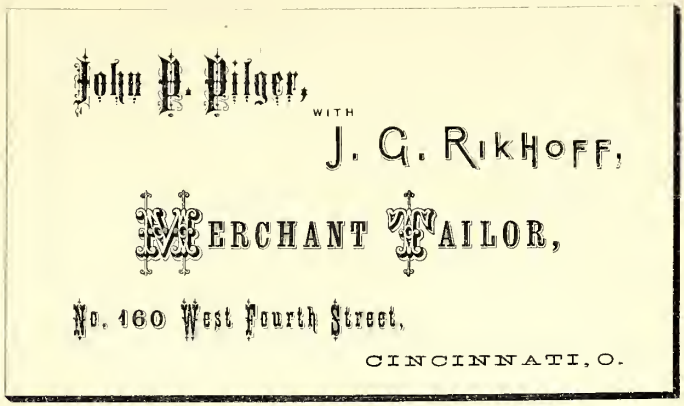
Dr. & Mrs. James Selkirk,



Tuesday Evening, September 13th, 1870,

At eight o' clock.

Richland, Ky.



(COVER OF BRIEF.)

Supreme Court of Ohio.

BRIEF.

Ex parte Joseph Lytle,

Habeas Corpus.

Motion for Allowance of Writ of Error to Probate Court of Ohio.

T. A. O'CONNOR, Att'y for Relator.

GEMS

OF

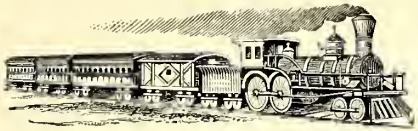
ENGLISH POETRY.

With Illustrations by Great Artists.

"Then came the magic of a poet's name,
Like light, upon my fancy; and I sat
Brooding for hours, amid sequestered nooks,
On all the mighty masters of the lyre."

LONDON:
T. NELSON & SONS, PATERNOSTER ROW;
EDINBURGH; AND NEW YORK.

1870.



Received, IN GOOD ORDER AND CONDITION, OF

Duncans, Ford & Elder,

At the Depot of the OHIO AND MISSISSIPPI RAIL ROAD,

the articles marked or numbered as below, which are to be delivered in like good order at

to _____ *or assigns, he or they paying freight for the same, at the rate of* _____

Dated at CINCINNATI, this _____ ***day of*** _____ ***1870.***

MARKS.	ARTICLES.	WEIGHT.

— or, Book of Specimens. —



OFFICE—267 Penn Street, Pittsburgh, Pa.
WORKS—Cor. First Avenue and Ferry St.

ORDERS BY MAIL SHOULD BE ADDRESSED TO DIAMOND INK COMPANY, PITTSBURGH, PA.

DIAMOND INK COMPANY,

MANUFACTURERS OF

Brilliant Black Inks,

B. F. H. LYNN, Gen'l Agent.

....., 187

— HARPEL'S TYPOGRAPH; —

L. P. HATCH,

WITH

UNION KNIFE COMPANY,

MANUFACTURERS OF

Superior Pen and Pocket Cutlery.

OUR GOODS ARE ALL WARRANTED.

JOHN A. PECK, *Pres't.*
E. B. MALLETT, *Sec'y.*

Naugatuck, Conn.

VICTOR SPIEGEL,

RULE DESIGNER,

Leipzig.

QUEEN CITY PRINTING INK COMPANY,

DeGOLYER & RYCHEN, Proprietors,

MANUFACTURERS OF

PRINTING INKS,

600 West Fifth Street,

Geo. DeGolyer,
John Rychen,

CINCINNATI.

OFFICE OF

DIEBOLD & KIENZLE,

Successors to Diebold, Bahmann & Co.

— MANUFACTURERS OF —

Fire and Burglar Proof Safes,

— AND —

PATENT COMBINATION BANK LOCKS,

Cincinnati, ... *187*

OFFICE OF

ADDY, HULL & CO.

Cincinnati, *187*

We hand herewith paper as named below, for credit on account Iron Sales. Please acknowledge receipt.

DATE.	TIME.	DRAWER.	AMOUNT.

We regret to find your Agency among those reporting

No Business

for the month of MAY, and our sympathies are with you, for we are well aware it afforded you no pleasure to be compelled to close the Fiscal Year with a blank. We shall be very glad indeed, to have you begin the new Year with business to report, and the month of June will be a very proper season for such a display of energy and determination, as will wipe out the cipher mark, now against you, for MAY.

OFFICE OF

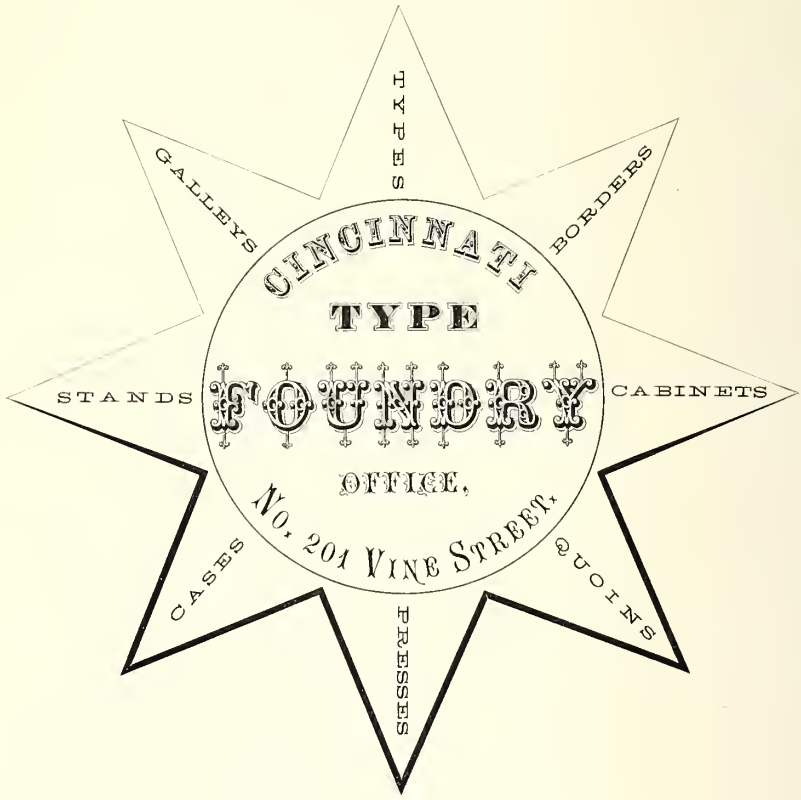
Cleaveland, Somerville & Johnston,

Lexington, 18

We hand herewith statement of your account, for which please execute notes in settlement, to the order of parties designated, and enclose to us at your earliest convenience. Your prompt attention will confer a favor.

CHRIST'S CHURCH,

Fourth Street.



To Apprentices!

Many elegant devices may be produced from Rules and Borders for Fancy Work, with slight labor; all that is required is a will and a little brain-work. This page is but a trifle to what may be done. Aim to accomplish and excel!

F. & A. M.

McMillan Lodge, No. 141.



BROTHERLY LOVE, RELIEF, AND TRUTH.

Brother

McMillan Lodge, No. 141, F. & A. M. will meet in Social Re-union, at Masonic Temple, on Saturday Evening, May 7th, 1870.

Yourself and Lady are respectfully invited to be present.

H. W. GEORGE, W. M.

J. B. Covert,

At Home,

7½, P. M.

SYRUP

— OF —

BROMIDE OF CHLORAL,

FOR THE IMMEDIATE RELIEF OF

Headache, Neuralgia, Spasmodic Asthma, Epilepsy, Nervousness, Delirium Tremens,

And all other Diseases of the Nerves.

THE great success attending the introduction of the **HYDRATE OF CHLORAL** in the above diseases, has induced the undersigned to introduce this preparation to the public.

It is composed of Bromide of Potassium and **HYDRATE OF CHLORAL** dissolved in Syrup.

Bromide Potassium has been used for years in nervous diseases of every form. In Epilepsy and Neuralgic Headache it has been proved a specific.

HYDRATE OF CHLORAL is a new remedy, lately introduced to the notice of the profession by Dr. LIEBREICH, who found it highly beneficial. It is found to differ most materially from the old narcotics, in producing no bad effects as sickness at the stomach and other disagreeable symptoms after its use.

No remedy has ever been found to produce healthful slumber so speedily, and thereby relieve pain.

It relieves pain, irritation, nervous excitement, and morbid irritability of body and mind.

It produces NO costiveness, no derangement of the constitution or general health; hence its superiority over Laudanum, Morphia, or Opium in any form.

To speak summarily, this preparation as a remedy may be adopted in all cases where Opium or its preparations are administered, without being followed by their distressing and pernicious consequences.

PREPARED BY

W. H. ADDERLEY,

Apothecary,

NORTH-EAST CORNER SIXTH AND MOUND STREETS, CINCINNATI, O.

Invoice of ..... shipped you this day to be sold on commission.

12.7

Cincinnati, ... 1870. **DIEBOLD & KIENZLE,**

To ..... Per .....

Duncans, Ford & Elder,

WHOLESALE GROCERS,

— AND —

COMMISSION MERCHANTS,

No. 69 Vine Street,

CINCINNATI, O.

Gentlemen:

We hand you the quotations of the Root Market, etc:—

Yellow Root,	*Bees Wax,*
Red or Blood Root,	*Feathers,*
Lady Slipper,	*Tallow,*
May Apple,	*Wool, tub washed,*
Seneca Snake Root,	*" unwashed,*
Virginia or Bl'k Root,	*Flax Seed,*
Beth Root,	*Navy Beans,*
Anglica,	*Com. White Beans,*
Spikenard,	*Flint Hides,*
Indian Turnip,	*Dry Salt "*
Sassafras Root Bark,	*Green "*
Ginseng,	*Dried Peaches,*
	" Apples,

OFFICE OF

Addy, Hull & Co.

Cincinnati, *187*

We to-day quote PIG IRON *as follows:*

No. 1 Hot Blast, Charcoal, ... @
" 2 " " " . . . . . @
Mill " " " . . . . . @
Iron Mountain Hot Blast, Charcoal, ... @
No. 1 Hot Blast, Stonecoal, ... @
" 2 " " " . . . . . @
" 3 " " " . . . . . @
Mill " " " . . . . . @
Cold Blast, Charcoal, (No. 1, 2, Mottled, and White,) @
Iron Mountain, Surface Ore, Malleable, . . . @

We offer for your selection the following Brands, comprising the productions of OHIO, INDIANA, KENTUCKY, TENNESSEE, MISSOURI, ALABAMA, *and* MISSISSIPPI:

HOT BLAST, Charcoal.

MONROE,	HAMDEN,	MADISON,	HOPE,
WASHINGTON,	LATROBE,	BLOOM,	ETNA,
MONITOR,	LAWRENCE,	EAGLE,	GALLIA,
IRON MOUNTAIN,	KENTON,	CENTRE,	LIMESTONE,
IRONDALE,	BOONE,	LA GRANGE,	CLARK,
ROUGH AND READY,	CUMBERLAND,	VANLEER,	BUFFALO.

HOT BLAST, Stonecoal.

KENTON,	KINGSLAND,	MASSILON,	ORANGE,
WESTERN,	VICTORIA,	SWIFTS,	FULTON.
STAR,	HUNTINGTON,	SCOTCH PIG,	

COLD BLAST, Charcoal.

IRON MOUNTAIN CAR WHEEL,	BIBB,	MISSISSIPPI,
IRON MOUNTAIN, SURFACE ORE, MALLEABLE,	LINCOLN,	LAKE SUPERIOR.
MARAMEC,		

(9)

BARGELT & VOGES,

Dealers in

HARDWARE & IRON,

COLLEGE CORNER, O.

A full assortment of Builders' Hardware, Carpenters' and Wagon Makers' Tools,

CONSTANTLY ON HAND.

OLD FASHION COPPER DISTILLED

WHISKY,

FROM

Brachmann & Massard,

CINCINNATI.

81 West Third Street, near Vine.

BOURBON WHISKEY

FROM

Brachmann & Massard,

81 West Third St. near Vine, Cincinnati.

or, Book of Specimens.

Secured by First Mortgage duly Stamped.

$ Cincinnati, O. 187

...after date promise to pay to the order of the **Andes Insurance Company**, of Cincinnati, ***Dollars,***

at their office, with interest at eight per cent. per annum, until paid, (said interest to be paid annually.) Value received.

No. Due

— 131 —

FRONT.

1628 **GYMNASIUM Members' Ticket.**

'70 & '71

Issued to

For One Year, ending *18*

Treas'r.

$10

Sec'y.

BACK.

102, 104 & 106
FOURTH STREET,
CINCINNATI, O.

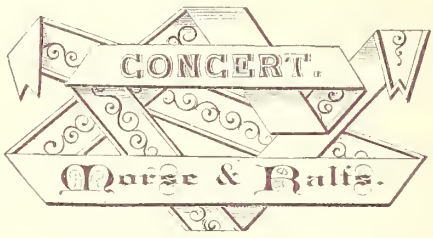
This Ticket is not Transferable, and if found in possession of any other than the person to whom issued will be forfeited.

GOLDEN
SHERRY.

Brachmann & Massard,

81 WEST THIRD STREET, NEAR VINE,

CINCINNATI, O.



TO ILLINOIS AGENTS.

Ohio Premiums in 1869.	*$170,936.96*
Ohio Losses in 1869.	*53,475.82*
NET,	*$117,461.14*
Illinois Premiums in 1869.	*$113,158.62*
Illinois Losses in 1869.	*48,999.52*
NET,	*$64,159.10*

The Phœnix, with its unrivalled agency organization, should do a much larger business in Illinois. Thus far, for the current year, indications are entirely satisfactory.

Golden Sherry.

Brachmann & Massard,

No. 81 West Third Street, near Vine,

CINCINNATI, OHIO.

The Young Ladies of Mount Auburn Seminary solicit the presence of yourself and friends at their

Annual Reunion and Social Pic Nic,

At the Grounds of Dr. John M. Harrison, near Glenwood Station, Tuesday, October 25th, 1870.

Grace P. E. Church, Avondale.

OPENING SERVICES, SUNDAY, FEBRUARY 27TH, 1870.

SUBSCRIPTION, $

NAME.

RESIDENCE,

Particular attention paid to "Style."

The Best Materials.

A. HIRSCH,
Late Hirsch & Scallan,

THE BOOT MAKER,

CINCINNATI, O.

The Best Work.

161 Race Street, 2d door above Fourth.

WOOD'S THEATRE.

House.

COMPLIMENTARY.
B. Macauley.

NOT TRANSFERABLE.

☞ Will be refused if presented by other parties.

NOT ACCEPTED ON BENEFIT NIGHTS.

BY O. F. CARNAHAN, CINCINNATI.

ANDES

Insurance CO. Cincinnati.

Cash Capital, $1,000,000.

Corporators and Commissioners:

Robert Buchanan,
Jos. C. Butler,
A. D. Bullock,
Sam'l N. Murphy,
Alfred Gaither,
H. A. V. Post,
Robert Mitchell,
Augustus Wessel,
Alexander Long,
C. W. Moulton,
J. B. Bennett.

Office, 118 West Fourth Street.

(OVER)

FROM

THE

BRANCH

OF THE

PHŒNIX

INSURANCE CO.

CINCINNATI,

O.

SPECIMEN BOOK

FROM THE

Cincinnati Type Foundry,

201 VINE STREET.

1870.

BY GEORGE BARNARD, CINCINNATI.

Cincinnati, 187

Mr

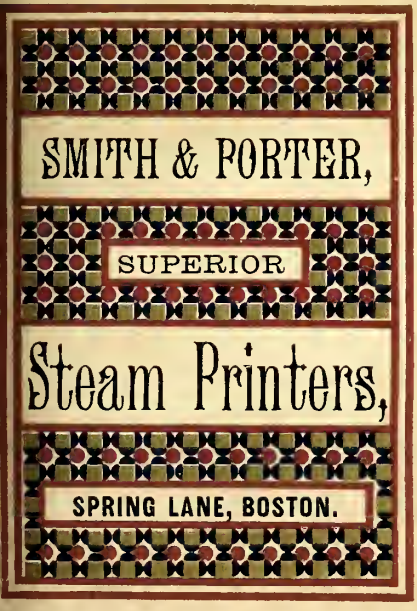
BOUGHT OF **J. G. RIKHOFF,** "Merchant Tailor."

No. 160 WEST FOURTH STREET.

186

Harpel's Typograph; Dec







BORDERS DESIGNED AND FURNISHED BY MESSRS. SMITH & PORTER, GENERAL PRINTERS, BOSTON, MASS.

ADDY, HULL & CO.

COTTON FACTORS AND COMMISSION MERCHANTS,

68 VINE STREET, CINCINNATI.

or, Book of Specimens.

SHIPPED, in good order and well-conditioned, by **ADDY, HULL & CO.** for account and risk of whom it may concern, on board the good Steamboat called the ..... the following articles, marked and numbered as below, which are to be delivered, in similar good order and condition, at the Port of ..... (the dangers of River Navigation and Fire only excepted) unto .....

or to his or their assigns, he or they paying freight for the said goods at the rate of .....

IN WITNESS WHEREOF, The Owner, Master, Agent, or Clerk of said Boat hath affirmed to ..... Bills of Lading, all of this tenor and date, one of which being accomplished, the other to stand void.

Dated at CINCINNATI, this ..... day of 187

☞All Alterations and Exceptions VOID unless consented to and signed by Shippers.

MARKS.	ARTICLES.	WEIGHTS.

187

(R)

WILL. H. BUCHER,

— WITH —

WILLIAM R. COX & CO.

PAINTS.

173 RACE STREET, CINCINNATI.

SLANE & DAY,

Diamond Setters,

AND

Manufacturers of Fine Jewelry,

58 West Fourth Street,

SECOND FLOOR. CINCINNATI.

SPECIALTY—ORDERED WORK.

DIEBOLD & KIENZLE,

(Successors to DIEBOLD, BAHMANN & CO.)

Manufacturers of Improved

Fire and Burglar Proof Safes,

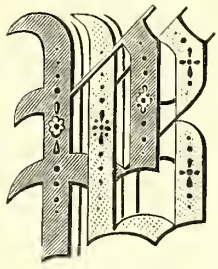
AND

PATENT COMBINATION BANK LOCKS,

88, 90 & 92 Elm St. bet. Second and Pearl,

C. DIEBOLD.
J. KIENZLE.

CINCINNATI, O.



CEREMONY CIRCULAR — LINE OF FOLDING.

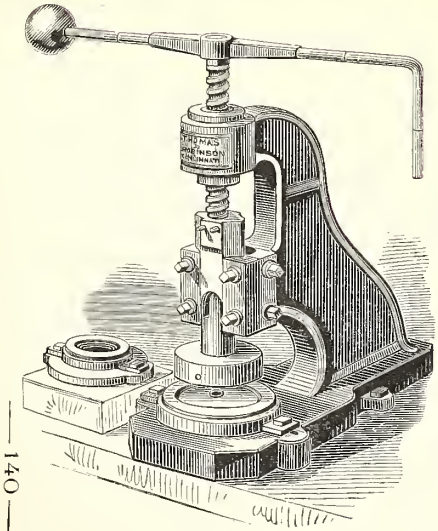
St. John's Protestant Church,

N. W. Corner Elm and Twelfth Streets,

Thursday Evening, October 13th, 1870,

AT SEVEN O'CLOCK.

Frank H. Pfau. Antoinette Ballauf.



O. Thomas. J. M. Robinson.

THOMAS & ROBINSON,

(Successors to Wm. R. Thomas,)

MACHINISTS,

Manufacturers of Hand-Punching, Drop, and Power Presses, Dies, etc.

No. 222 West Second Street, near Elm,

Cincinnati, ... 187

140

HARPEL'S TYPOGRAPH.

CHAMBERS, WENTWORTH & CO.

DEALERS IN LEAF TOBACCO AND GENERAL COMMISSION MERCHANTS,

OPPOSITE LOWER STEAMBOAT LANDING,

Maysville, Ky. 187

COMMERCIAL

INSURANCE CINCINNATI. COMPANY,

186

M

Cincinnati, 187

Received of **Wallis & Elderton,**

From

tons Pig Iron.

SOUTHERN INSURANCE COMPANY.

NEW ORLEANS, SEPT. 1870.

DEAR SIR:—

Your favor reporting *no* business for the month of August has been received, and the fact duly entered upon our books—blank number one for the Fall term. Such things at times will occur, but, by faithful energy and active enterprise, it is to be hoped a frequent repetition may be avoided. This Company intends, if possible, to DOUBLE its premium receipts for 1871, as compared with the figures of the previous year, and for this increase we look mainly to agencies which heretofore have not made substantial progress. There is no more popular Company in the South than the time-tried and fire-tested SOUTHERN, nor one possessing greater claims to public patronage.

We desire your aid in making good our estimate of the year's business.

Respectfully,

G. E. PONSONBY,

President.

FÊTE CHAMPÊTRE,

ON THE GROUNDS OF

Miles Greenwood, Esq.

Avondale, Friday Afternoon, May 27th, '70.

ENTRANCE TICKET.

Price, Fifty Cents.

WM. MEITZLER,

with

Diebold & Kienzle,

Manufacturers of

FIRE AND BURGLAR PROOF

SAFES,

Office, No. 90 Elm Street, CINCINNATI, O.

Geo. Shotwell & Bro.

COOPERAGE & COOPERS' SUPPLIES,

No. 13 Vine Street,

A. D. MORRISON. CINCINNATI, O.

1870

July Ticklers.

With this find Tickler of risks expiring at your agency during the month of JULY, to which your attention is invited. Examine the list and check it with your Record Book. Guard well the renewals, for therein is wisdom in these active, stirring times.

Of NEW business much is offering—the development of weakness and impairment in some companies rendering the old and strong offices more attractive to property owners than ever. Examine such business carefully, and in transferring it to Phœnix Books, make it your study to get better rates than formerly paid to cheap institutions; for risks at low rates are just as capable of injuring the Phœnix as any other office. Keep up the rates: earn the reputation of a high-priced agent, and glory in the fact that you deal in Reliable Indemnity rather than in Cheap Insurance.

Be it yours to uphold the dignity of the profession, and add reputation to the present high position of

Phœnix Agents.

PHŒNIX HARTFORD

ESTABLISHED 1857



PARTY INVITATION — LINE OF FOLDING.

Merry Four Dancing Club.

FIRST GRAND SOCIAL HOP,

To be given at

Latonia Springs, Thursday Evening, August 4th, 1870.

GEO. N. STEVENS, JNO. OVERMAN, GEO. H. DAVISON, JNO. FELTHAUS.

1870. **JULY.** 1870.

The attention of the friends and patrons of the

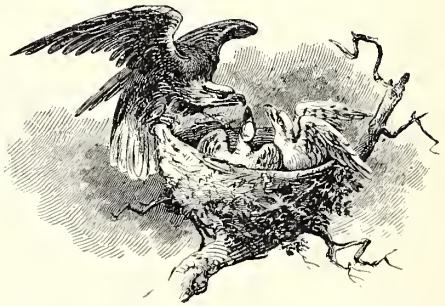
— **EAGLE** —

Insurance Company, of Providence, R. I. is respectfully directed to its present brilliant and prosperous condition as revealed by its

12th Financial Statement.

At no time in its hitherto successful and marked career, has it been able to come before the public with equal claims upon their patronage. For past liberal patronage we are thankful, the public have realized the benefits of good insurance, and our mission has been crowned with success. Agents of the EAGLE will still continue to be found in every city, town, village, and prominent settlement in the United States,—from the Atlantic coast to the golden shores of the Pacific slope, and from the Gulf of Mexico to the Northern Lakes,—ready and willing to attend to the wants of property holders in the line of first-class insurance, and able to guarantee indemnity of the order which stands the test of time and fire, to public use and private satisfaction, and better security against the adversity fire so frequently causes, than hoarded gold.

In the future, as in the past, losses will be paid promptly, business attended to with dispatch, all classes of risks accepted, large insurance granted where values justify it, rates as low as commensurate with the hazards assumed and protection of the assured, and nothing left undone on the part of the management to make the EAGLE worthy the confidence and pride of the people; a tower of strength in the day of calamity, and a sure refuge from the angry Fire-Fiend.



We deal in Reliable Indemnity, not Cheap Insurance.

Notice!—BE VERY CAREFUL OF YOUR CARD PLATE, as it easily becomes scratched and corroded, thereby impairing the beauty of the engraving. You will find it to your advantage to leave your Plate in our charge, as our facilities for keeping them in good order are perfect.

All Plates received are carefully registered.

SHIPLEY & SMITH,

Practical Engravers, 42 West Fourth Street, Cincinnati.

Wedding and Visiting Cards Engraved and Printed in the Latest Styles.

SAMUEL LOWRY. WM. J. LOWRY.

Samuel Lowry & Co.

LATE LOWRY & PATTERSON,

Successors to J. D. LEHMER,

COMMISSION MERCHANTS,

36 Vine Street, Cincinnati.

PROVISIONS, FLOUR, GRAIN, COTTON, Etc.

Etablirt 1829.

Cincinnati Versicherungsgesellschaft.

Feuer und Marine.

Office verlegt nach

No. 81 West Dritte-Strasse.

Bezahltes Kapital und Ueberschuß $220,000.00.

G. W. Williams, Präsident.

Wm. H. Calvert, Sekretär.

T. Bishop Clement, Ingenieur. Henry Bohling, Besichtiger.

Gentlemen's German.

THURSDAY EVENING, AUGUST 25TH, 1870.

At Becker's Hall.



Tenth Anniversary Re-union

OF THE

WOODWARD CLUB,

AT

HOPKINS' MUSIC HALL,

Tuesday Even'g, November 1st, 1870.

DANCES.

Promenade March at 8½ o'clock.

1—Quadrille, ... Invitation.

2—Quadrille, ... The Muses.

3. { 1—Waltz, . . Beautiful Blue Danube.
   { 2—Schottische, ... Emersonian.

4.—Quadrille, ... Reconciliation.

5.—Quadrille, ... Bon Ton.

6. { 1—Waltz, ... Pendekton.
   { 2—Galop, ... Wild Hunt.

7.—Quadrille, ... Lancers.

8.—Quadrille, ... La Mode.

SUPPER.

9. { 1—Polka, ... Tell Tale.
   { 2—Mazourka, . . One Heart, one Thought.

10.—Quadrille, ... Barbe Blue.

11.—Quadrille, ... Coquette.

12. { 1—Schottische, ... Josephine.
    { 2—Galop, ... No Rest.

13.—Quadrille, ... Sophien.

14. { 1—Waltz, ... Artist's Life.
    { 2—Trois Temps, ... La Amorita.

15.—Quadrille, ... La Grace.

16.—Reel, ... Magnolia.

No. $3.

From 187

(NAME AND ADDRESS OF SUBSCRIBER.)

Name, ...

Post Office, ...

County, ...

State, ...

This end of the Receipt must be returned with the money, to be Registered, before the day of the Drawing.

This Receipt entitles the Holder to One Chance in the Eighth Distribution of Gifts to be distributed at Cincinnati, Ohio, March 6, 1871, to the Subscribers to "L. D SINE'S LITERARY JOURNAL."

No. $3.00.

L. D. SINE'S

Literary Journal

CHOICE LITERATURE — FAMILY READING — Devoted To — HUMOROUS SKETCHES — GENERAL NEWS.

Received of the Holder **THREE DOLLARS,**

For One Year's Subscription to the "Literary Journal."

L D Sine

Publisher.

J. B. BENNETT, PRESIDENT,

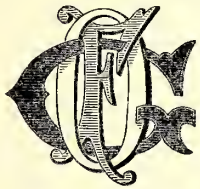
THE

INSURANCE ANDES COMPANY,

CASH CAPITAL, OF CINCINNATI, OHIO $1,000,000.00.

FINE CHEMICALS AND PHARMACEUTICAL PREPARATIONS OF ALL KINDS.

CINCINNATI, 18



Bought of O. F. GORDON,

DRUGGIST AND CHEMIST,

N. E. Corner Central Avenue and Eighth Sts.

TERMS CASH.

151

— or, Book of Specimens. —

MONTHLY STATEMENT.

Cincinnati, ... *187*

To GEORGE MELDRUM, Jr.

Folio ..... 23 West Fourth Street.

To Mdse. as per Bill ren'd,

MONTHLY STATEMENT.

Cincinnati, ... *187*

M

Terms Net Cash.
Interest charged after 30 days.

In Account with

E. G. WEBSTER & Co.

STATEMENT.

FOLIO ..... Cincinnati, ... *187*

M

Dr. to ROYER WHEEL CO.

375 West Third Street.

No.

United States of America,

$1,000

STATE OF OHIO.

ROUTE "9" STREET RAILWAY COMPANY,

SEVEN PER CENT. FIRST MORTGAGE BOND.

OF CINCINNATI.

Secured by Mortgage and Duly Stamped.

THE "ROUTE 9 STREET RAILWAY COMPANY," a Corporation under the Laws of the State of Ohio, acknowledges itself indebted to Charles Moran, of the City of New York, or Bearer, in the sum of **ONE THOUSAND DOLLARS**, and promises to pay the same on the surrender of this Bond, on the first day of March, eighteen hundred and ninety, at the Bank of the Ohio Valley, in the City of Cincinnati, Ohio, with interest at seven per cent. per annum, payable semi-annually, according to the tenor and effect of the coupons or interest warrants therefor, hereto attached. This Bond is one of a series of bonds, 250 in number, each of like amount, tenor, and date, authorized by a resolution of the Board of Directors of said Company, which Bonds are issued for the purpose of securing advances made, and to be made, for the building, completing, and operating their Railway, and the principal and interest, of which are secured by a **Mortgage**, or Deed of Trust, to Charles Moran, of the City of New York, duly executed under the authority of the resolution aforesaid, and covering all of the Railway built, or to be built, by said Company, in the City of Cincinnati, Ohio, being about six and three-tenths miles in length, with all of the appurtenances, equipments, and rolling stock now owned, or hereafter acquired by said Company, for operating said Road, and also including the income and franchises of said Company, and duly recorded, in trust, to secure the payments of said Bonds, with the interest thereon.

In Witness Whereof, The said "Route 9 Street Railway Company," have caused these presents to be signed by their President, and attested by their Secretary, under their corporate seal hereto affixed, this first day of March, in the year eighteen hundred and seventy.

And Cancelled.

President.

Null, Void.

Secretary.

HARPEL, PRINTER, CINCINNATI.

March 1st, 1890.

Route 9 Street Railway Co.
OF CINCINNATI,

Will pay the bearer hereof, on the first day of MARCH, A. D. 1890, at the Bank of the Ohio Valley, in the City of Cincinnati, O. THIRTY-FIVE DOLLARS, being the interest for one-half year to that date, on the above Bond of said Company, No.....

Secretary.

Sept. 1st, 1898.

Route 9 Street Railway Co.
OF CINCINNATI,

Will pay the bearer hereof, on the first day of SEPTEMBER, A. D. 1889, at the Bank of the Ohio Valley, in the City of Cincinnati, O. THIRTY-FIVE DOLLARS, being the interest for one-half year to that date on the above Bond of said Company, No .....

Secretary.

March 1st, 1889.

Route 9 Street Railway Co.
OF CINCINNATI,

Will pay the bearer hereof, on the first day of MARCH, A. D. 1889, at the Bank of the Ohio Valley, in the City of Cincinnati, O. THIRTY-FIVE DOLLARS, being the interest for one-half year to that date, on the above Bond of said Company, No .....

Secretary.

Sept. 1st, 1888.

Route 9 Street Railway Co.
OF CINCINNATI,

Will pay the bearer hereof, on the first day of SEPTEMBER, A. D. 1888, at the Bank of the Ohio Valley, in the City of Cincinnati, O. THIRTY-FIVE DOLLARS, being the interest for one-half year to that date, on the above Bond of said Company, No.....

Secretary.

March 1st, 1888.

Route 9 Street Railway Co.
OF CINCINNATI,

Will pay the bearer hereof, on the first day of MARCH, A. D. 1888, at the Bank of the Ohio Valley, in the City of Cincinnati, O. THIRTY-FIVE DOLLARS, being the interest for one-half year to that date, on the above Bond of said Company, No.....

Secretary.

THE EARTH

And its Wonders.

IN

A SERIES OF FAMILIAR SKETCHES.

BY

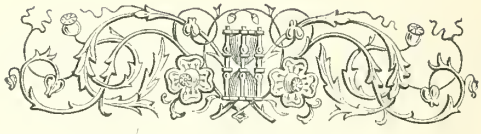
CHARLES ADAMS, D. D.

"*I meditate on all thy works.*"—PSALM CXLIII, 5.

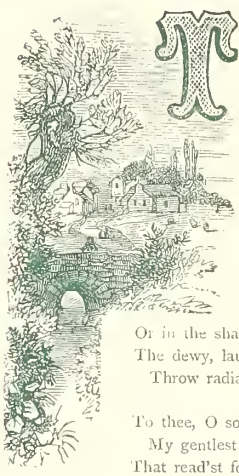


CINCINNATI:
HITCHCOCK AND WALDEN.
NEW YORK:
CARLTON AND LANAHAN.
1870.

From Printing Office of Methodist Book Concern—R. P. THOMPSON, Sup't.



. . . . . .



TO thee I dedicate these leaves,
Torn from the forest nooks,
When blue-eyed Summer laid her hand
Upon the wood, and through its limbs
Breathed living joy and love.

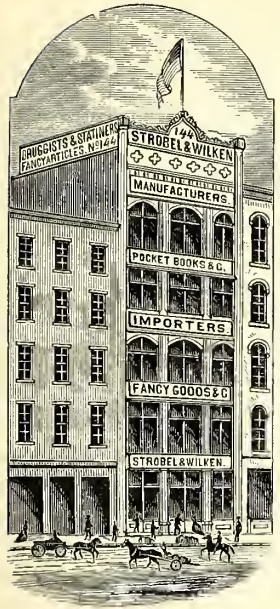
To thee, thou tendril of my heart!
That clingest around it still,
In every season of our life,—
Whether the winds of chill Adversity
Bestrew our path with leaves,—

Or Ceres pours her golden horn
Of beauty in our laps,—
Or in the shadow of our days
The dewy, laughing eyes of Hope
Throw radiant gleams divine:—

To thee, O solace of my soul!
My gentlest friend, my love!
That read'st forever to my heart
The tale of deep and patient toil,
Through the far ways of life:—

To thee I dedicate these flowers,
Gathered in woodlands gray
Throughout the devious, sunny days,
When Dryads sat beneath the boughs,
And talked, as friends, to me!

From Printing Office of Methodist Book Concern—R. P. Thompson, Sup't.



Chas. Strobel.
Geo. Wilken.

Cincinnati, *187*

M

Bought of STROBEL & WILKEN,

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WORK BOXES, TRAVELING BAGS, BASKETS, TOILET CASES, PERFUMERY, AND MUSICAL INSTRUMENTS,

TERMS CASH. *144 Walnut Street, below Fourth.*

155

Insert No Advertisements for the PARKER without special instructions from Branch at Cincinnati.

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HATTER
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NEW PUBLICATION.

AGENTS Wanted for **BELDEN: The White Chief**

Twelve Years among the Wild Indians of the Plains.

No book of authentic adventures that has made its appearance during the last twenty years is equal to it.

C. F. VENT, Publisher, Cincinnati.

How are You, January One!



A. D. 1871?

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Avondale.

CHAS. R. NEWBRIGHT,

SIGN AND HOUSE PAINTER

GRAINER, ETC.

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ST. LOUIS, Mo.



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Insurance Company, Hartford, Conn.

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Surveyor,

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Homœopathist,
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J. J. BERNE,
Supervisor of Agencies.

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London,
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John A. Ballentine.
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T. W. SPRAGUE & CO.
DEALERS IN
FINE CLOTHING
AND GENTS' FURNISHING GOODS,
S. E. Cor. Fourth & Vine Sts.
CINCINNATI, O.

THOMAS POWELL,
Attorney at Law,
CINCINNATI, O.
OFFICE: Corner Court and Main Sts.
OPPOSITE COURT HOUSE.

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XIII.

Spring-House Acquaintances.

ALTHOUGH a pleasant breeze comes from the West, and passes along our country hills and valleys, undulating the fields of grain, and bringing cool odors with it, yet sometimes the Summer sun pours down a heat that is, perhaps, as sweltering as the reflected sunshine of the parched and dusty city. Occasionally the wind is hushed—not enough stirs to sway the lightest gossamer that hangs tremblingly from the old roof of the spring-house. On such occasions I leave my cozy den in the attic, and seek the cool retirement of the limestone building, amid pans and crockery-ware, and the quiet whisperings of the spring-brook.

Water dropping from high places or gliding over pebbly surfaces seems to have a peculiar effect on the atmosphere. Visit the fountain, where it spurts up far into the air, falling in mist and spray to the earth again, and, however sultry may be the day, you will find the air in that locality awakened into magical freshness, and the feverishness removed entirely from the atmosphere. So in the spring-house: as the breeze of this pleasant spot

From Printing Office of Methodist Book Concern—R. P. Thompson, Sup't

OUR

ORIENTAL MISSIONS.

VOLUME I.

INDIA AND CHINA.

BY

EDWARD THOMSON, D. D., LL. D.,

Late Bishop of the Methodist Episcopal Church.

CINCINNATI:
HITCHCOCK AND WALDEN.

NEW YORK:
CARLTON AND LANAHAN.

1870.

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Cincinnati

— Harpel's Typograph. —

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BANKER,

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Geo. H. Shotwell & Co.

AUCTIONEERS AND Real Estate Brokers.

75 West Third Street,

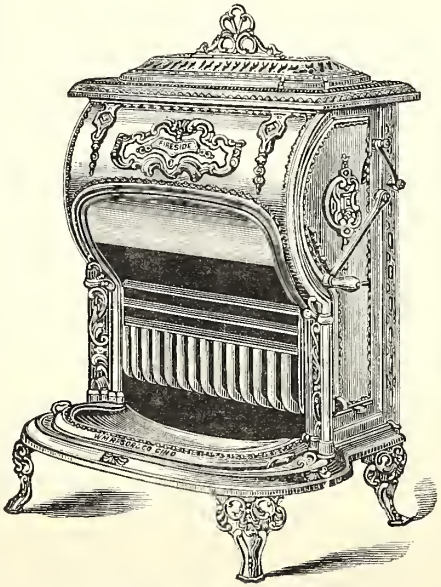
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Chas. G. Cannon,

Decorator.

WILLIAM RESOR & CO.



"FIRESIDE."

WM. RESOR & CO.

RESOR BLOCK,

Corner Front and Race Streets.

CINCINNATI.



WHOLESALE PRICE LIST

—OF—

STOVES,

Hollow Ware, etc.

August 1st, 1870.

Stereotyped by Typographic

FALLS CITY STOVE FOUNDRY.

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— OF —

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STOVES,

Grates, and Hollow Ware.

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Corner Vine and Pearl Streets,

CINCINNATI.

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WE shall be prepared this Fall to offer our customers a complete stock of goods in all the departments of our business, viz:—Hats and Caps of all kinds; Ladies' and Gentlemen's Furs; Buck, Sheep, and Kid Gloves.

Prices will be as low, and terms as liberal as those of any house in our line. We purchase exclusively for Cash, from first hands, and manufacture extensively ourselves, consequently are enabled to offer superior inducements to Cash and Short-Time buyers.

We hope to see all our old friends and a great many new ones.

WM. DODD & CO.

Corner Vine & Pearl Streets.

All Work Strictly C. O. D.

58 West Fourth St. CINCINNATI, O. 1867.

M

Harper Brothers,

First-class Letterpress Printers.



— Handel's Gildograph. —

Franklin Type Foundry, 168 Vine Street.

Cincinnati, 187 .

11

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SARVEN'S PATENT

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Office of Roger Wheel Company,

Cincinnati, ... 187

Merchants National Bank,

Pay to ..... ,or Order,

..... Dollars.

100

$

Cincinnati Type Foundry.

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H. BARTH.
W. P. HUNT.

BOURBON
WHISKEY

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The Largest Job Printing Establishment in the United States.

OFFICE OF



Russell, Morgan & Co.

NO. 20 COLLEGE STREET.

CINCINNATI, ...1870.

Funeral Notice.

Yourself and family are respectfully requested to attend the funeral of

William Ramsdell, Jr.

from the residence of his uncle E. P. Rice, on Tremont Street, near Seventh, tomorrow afternoon, at three o'clock.

A Discourse by Rev. S. E. Angell, will be delivered immediately before the funeral, at the First Presbyterian Church.

Galveston, October 5th, 1870.

LOUIS RIPKA,

MANUFACTURER OF

Nonsuch Cottonades

AND

SUPER LONG CLOTHS,

Lower Five Mills,

Represented by R. S. WILEY. MANYUNK, Pa.

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Importer and Dealer in

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WINES, CORDIALS, &c.

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John Tottengill,

MERCHANT TAILOR,

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LOUISVILLE, KY.

PRICE, ONE DOLLAR.

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Prepared according to the formula published in the Cincinnati Journal of Medicine, May, 1860.

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NEURALGIA, SPASMS,
DIARRHŒA,
DYSENTERY, DELIRIUM,
etc., etc.

Used in all the principal Hospitals in Europe and America.

None genuine without the written signature of the proprietor.

ALBERT ROSS & CO.
SOLE AGENTS,
South-West Corner Eighth Street and Central Avenue, Cincinnati, Ohio.

CAUTION.

Keep the Bottle well stopped and in a cool place.

450. PLEASE PAY AT THE DESK.

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JOINT STOCK
Agricultural and Mechanical Soc'y.
COMPLIMENTARY,
Connersville, Ind. from Sept. 6th to 10th, 1870.

TRAIN CALDWELL, *President.*
CHAS. ROEHL, *Sec'y.* EDW. F. CLAYPOOL, *Treas.*

Baltimore, 187

M

To **ROBERT REID,** Dr.

For the "DAILY CLIPPER,"

For *months, to date,* $

Received Payment,

ROBERT REID.

REVENUE STAMP.

Cumminsville, 187

Mr.

Bought of M. H. Spillard,

DEALER IN COAL AND LIME,

Bushels Hocking Valley Coal, @ ..... c. ℔ bushel, $

Bushels Youghiogheny Coal, @ ..... c. ℔ bushel, $

Bushels Springfield Lime, @ ..... c. ℔ bushel, $

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CUSTOM MADE,
WARRANTED,
EZRA SWAIN,
Noblesville, Ind.

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WARRANTED,
EZRA SWAIN,
Noblesville, Ind.

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Lockarde, Brood & Busby,
MACON, GA.

STRYCHNIA
From W. H. ADDERLEY, Cor. Sixth & Mound Sts.
POISON.

VOL. 1.

VOL. 2.

VOL. 3.

VOL. 4.

VOL. 5.

VOL. 6.

GERMANIA.

REMINDER. *Upon receipt of this, please forward your returns for* ***MONTH OF JULY, 1870,*** *and much oblige. If no business to report,* ***LET US KNOW THE FACT.***

E. S. T.

New York, August 12th, 1870.

OCTOBER, 1870.

AGENTS will very much oblige by forwarding their September returns, upon the new form of Abstract, promptly on the 30th inst. Where this is impossible, we trust that the first day of October will not be allowed to pass until Uncle Sam has the documents in his possession. Entering from the new form upon our books will consume, for a while, more time than usual, hence our request for prompt returns, so as to enable us to transmit Monthly Schedule to the Parent office on time.

ÆTNA.

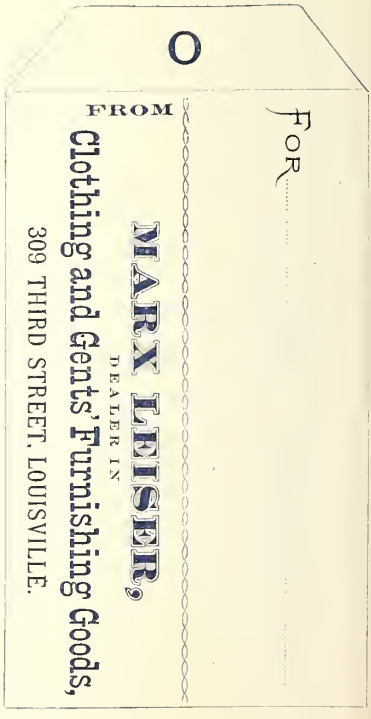
Butterby & Darling,

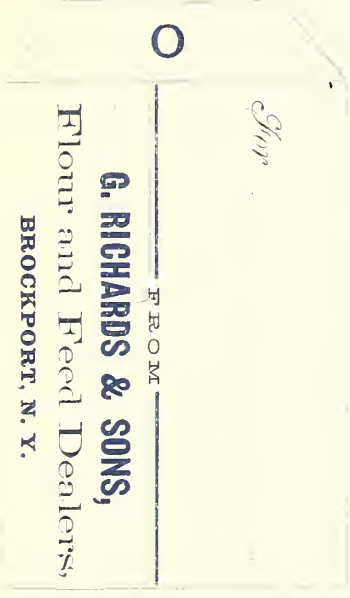
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Growers and Shippers of

Kelly Island Grapes,

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O

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MANUFACTURERS OF

Hand-Punching, Drop, and Power Presses, Dies, etc.

222 West Second St. CINCINNATI.

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For

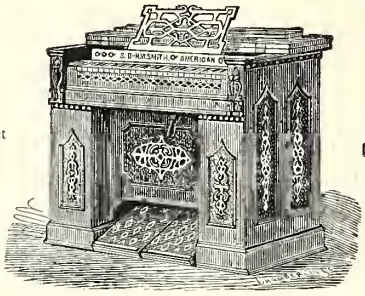
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Smith's American Organs.



This Cut is an exact representation of Style PP.

No Home complete without one.

PRICE, $275.

WITH RESONANT SINGING TONE.

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S. D. & H. W. Smith, Boston, Mass.

THERE will also be found constantly on hand all other styles of Smith's American Organs to sell or rent, (with a *very liberal discount* to Sabbath-Schools, Churches, and Ministers,) at prices ranging from $100 to $1,000.

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Below are described five of the most useful and popular styles.

Style No. 1, **Price, $100.**	Five Octave, single reed, in solid Black Walnut Case, sunken Molded Panels, Knee Swell, Tremolo, and Metallic Blow Pedals.
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Sunday-School Hymnal. 25 cts. each, $20 per hundred. Containing all the hymns (without the music) of the Singing Pilgrim and Musical Leaves. Schools who do not read music can be supplied with the words, and those who desire music with the Pilgrim and Leaves, thereby obtaining a large collection, for the entire school, at a small expense.

Hallowed Songs. Revised, 320 pages, muslin covers. 75 cts. each, $50 per hundred. This Book is universally admitted to be the best Book extant for *Prayer*, *Social*, and *Revival Meetings*. Its Hymns and Tunes are selected from all sources, both old and new, and are of the most Spiritual and reviving character.

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State Agent.

ASSETS, JULY 14, 1870.

Cash in City Banks, . .	$582,244 81
Cash in Company's Safe,	1,454 82
U. S. and Municipal Bonds, .	37,270 57
Bonds and First Mortgages on Real Estate, (worth $1,023.323,)	379,029 80
	$1,000,000 00

Personally Examined and Certified to by
JAS. H. GODMAN,
Auditor of Ohio.

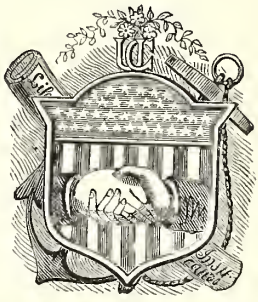
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NEW ALBANY, IND.

No.

UNION CENTRAL LIFE



Insurance Company.

ASSURANCE ON THE LIFE OF

Amount, $

Date

Term

Premium, $

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General Agent

OFFICE: - - CINCINNATI, O.

Western Methodist Book Concern Print.





Geo. Keppler & Bro.

Restauratiers

and dealers in

FINE IMPORTED CONFECTIONS, &C.

232 West Fourth Street,

Near Central Avenue, Cincinnati, Ohio.

ASTRONOMICAL CALCULATIONS, 1871

For the Western and South-Western States.

The Sun's Rising and Setting is given in Mean or Clock Time, corrected for refraction, and is the true Time when the Sun's upper limb is at the horizon.

ECLIPSES.

In the year 1871 there will be four eclipses: two of the Sun and two of the Moon.

I. A partial Eclipse of the Moon, January 6th. Moon rises eclipsed.
II. An Annular Eclipse of the Sun, June 17th. Invisible.
III. A partial Eclipse of the Moon, July 2d. Invisible.
IV. A total eclipse of the Sun, December 11th. Invisible.

THE SIGNS OF THE ZODIAC.

ARIES, ♈ HEAD AND FACE.

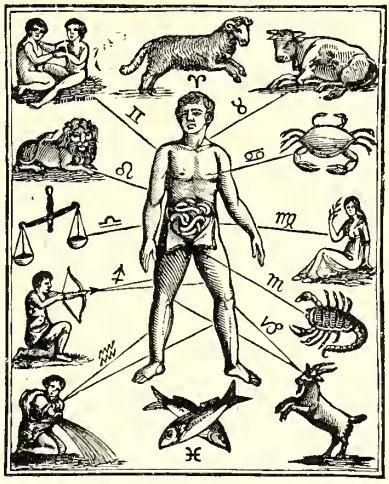
GEMINI, THE ARMS. ♊ — *TAURUS*, THE NECK. ♉

LEO, THE HEART. ♌ — *CANCER*, THE BREAST. ♋

LIBRA, THE REINS. ♎ — *VIRGO*, THE BOWELS. ♍

SAGITTARIUS, THE THIGHS. ♐ — *SCORPIO*, THE SECRETS. ♏

AQUARIUS, THE LEGS. ♒ — *CAPRICORNUS*, THE KNEES. ♑



PISCES,)(THE FEET.

NAMES AND CHARACTERS OF THE PLANETS, Etc.

☉ The Sun.	♂ Mars.	☌ Conjunction.	☽ First Quarter.
♁ The Earth.	♃ Jupiter.	☍ Opposition.	☽ Full Moon.
☿ Mercury.	♄ Saturn.	☊ Ascending Node.	☾ Last Quarter.
♀ Venus.	♅ Herschel.	☋ Descending Node.	● New Moon.

THE FOUR SEASONS.

Sun enters Aries March 20d. 7h. 42m. evening. Spring commences.
Sun enters Cancer June 21d. 4h. 4m. evening. Summer commences.
Sun enters Libra September 23d. 6h. 18m. morning. Autumn commences.
Sun enters Capricorn December 22d. 0h. 21m. morning. Winter commences.

MOVABLE AND OTHER FEASTS.

Epiphany	Jan. 6	Good Friday	Apr. 7	Whit Sunday	May 28
Septuagesima Sunday	Feb. 5	Easter Sunday	Apr. 9	Advent Sunday	Dec. 3
Ash Wednesday	Feb. 22	Ascension Day	May 18	Christmas	Dec. 25

EMBER DAYS.

1. Wednesday, Friday, and Saturday after 1st Sunday in Lent. March 1, 3, and 4.
2. Wednesday, Friday, and Saturday after Pentecost. May 31; June 2 and 3.
3. Wednesday, Friday, and Saturday after 14th of September. September 20, 22, and 23.
4. Wednesday, Friday, and Saturday after 14th of December. December 20, 22, and 23.

CHRONOLOGICAL CYCLES.

Dominical Letter	A	Lunar Cycle	10
Epact	9	Solar Cycle	4
Roman Indiction	14		
Julian Period	6584		

The first day of January, 1871, is the 2,404,420th day since the commencement of the Julian Period.

THE BEST IS THE CHEAPEST!

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REDUCED PRICE LIST

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Incomparable Minstrels
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For Beautifying the Skin,

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TAN, FRECKLES,

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Obviating the use of Powder.

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Use the Lotion after each Ablution.

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BRASS HINGES

FOR INSIDE SHUTTERS.

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JANUARY, 1871.

MOON'S PHASES.	D.	H.	M.	MORN OR EVE.	MOON'S PHASES.	D.	H.	M.	MORN OR EVE.
FULL MOON.....	6	3	45	Eve.	NEW MOON.....	20	6	53	Eve.
LAST QUARTER.....	14	1	19	Morn.	FIRST QUARTER...	28	7	36	Morn.

Days. Month.	Week...	Cincinnati. RISES.	SETS.	SETS.	Chicago. RISES.	SETS.	SETS.	Nashville. RISES.	SETS.	SETS.	Signs in the Zodiac, etc. SOUTH.	Equation of Time.	SIGNS.	PLANETARY CONSTELLATION.

First Sunday after Christmas—MATT. I, 18.

																			D H M
1	S	H M 7 21	H M 4 48	H M 2 24	H M 7 30	H M 4 39	H M 2 29	H M 7 12	H M 4 57	H M 2 20	H M 8 22	M S +3 51	♉	☿ gr. el. E.,	1	5 30 e.
2	M	7 21	4 48	3 22	7 30	4 39	3 29	7 12	4 57	3 18	9 06	4 19	♉	☉ in Perigee,	2	6 22 m.
3	T	7 21	4 49	4 20	7 30	4 40	4 28	7 12	4 58	4 13	9 53	4 47	♊	♂ ♃ ☾	4	9 35 m.
4	W	7 21	4 50	5 18	7 30	4 41	5 27	7 12	4 58	5 10	10 41	5 14	♊	☿ in ☊	5	9 26 m.
5	T	7 21	4 51	6 15	7 30	4 42	6 25	7 12	4 59	6 06	11 32	5 41	♋	☾ eclipsed.	Visible.	
6	F	7 21	4 52	rises.	7 30	4 43	rises.	7 12	5 00	rises.	mo'n	6 07	♋	☉	6	3 45 e.
7	S	7 21	4 53	6 15	7 30	4 44	6 07	7 11	5 01	6 24	0 23	6 33	♌	♂ ♅ ☾	7	8 43 m.

First Sunday after Epiphany—LUKE II, 41.

8	S	7 20	4 54	7 10	7 29	4 45	7 02	7 11	5 02	7 17	1 15	6 59	♌	☿ stationary,	8	11 24 m.
9	M	7 20	4 55	8 18	7 29	4 46	8 11	7 11	5 03	8 24	2 07	7 24	♋	□ ☿ ☉	9	11 50 m.
10	T	7 20	4 56	9 21	7 29	4 47	9 16	7 11	5 04	9 25	2 57	7 48	♍	☿ in Aphel ,	10	9 27 e.
11	W	7 20	4 57	10 25	7 29	4 48	10 22	7 10	5 05	10 27	3 46	8 12	♍	☿ in Perihel.,	10	11 19 e.
12	T	7 19	4 58	11 30	7 28	4 49	11 29	7 10	5 06	11 30	4 34	8 35	♎	♂ ☌ ☾	12	2 3 e.
13	F	7 19	4 59	mo'n	7 28	4 50	mo'n	7 10	5 07	mo'n	5 22	8 58	♎	♂ ☿ ♀	13	10 59 m.
14	S	7 19	5 00	0 37	7 27	4 52	0 38	7 09	5 08	0 36	6 11	9 20	♏	☾	14	1 19 m.

Second Sunday after Epiphany—JOHN II, 1.

15	S	7 18	5 01	1 47	7 27	4 53	1 50	7 09	5 09	1 44	7 02	9 42	♏	☌ ♅ ☉	14	9 10 e.
16	M	7 18	5 03	2 59	7 27	4 54	3 05	7 09	5 10	2 54	7 55	10 02	♐	♂ ☿ ☉ Inf.,	17	8 12 e.
17	T	7 18	5 04	4 10	7 26	4 55	4 18	7 08	5 11	4 03	8 52	10 22	♐	♂ ♄ ☾	18	11 11 e.
18	W	7 17	5 05	5 22	7 25	4 56	5 30	7 08	5 12	5 14	9 52	10 42	♑	♂ ☿ ☾	20	7 37 m.
19	T	7 17	5 06	6 27	7 25	4 58	6 36	7 08	5 13	6 16	10 54	11 01	♑	♄ in Aphel.,	20	4 0 e.
20	F	7 16	5 07	sets.	7 24	4 59	sets.	7 07	5 14	sets.	11 55	11 18	♒	☽	20	6 53 e.
21	S	7 16	5 08	5 59	7 24	5 00	5 51	7 07	5 15	7 06	eve.	11 36	♒	♂ in Aphel.,	21	1 47 m.

Third Sunday after Epiphany—MATT. VIII, 1.

22	S	7 15	5 10	7 07	7 23	5 01	6 59	7 06	5 16	7 12	1 48	11 52	♓	☿ greatest Hel. Lat. N.		
23	M	7 15	5 11	8 14	7 22	5 03	8 08	7 06	5 17	8 18	2 39	12 08	♓	☌ ☿ ☾	21	2 8 e.
24	T	7 14	5 12	9 18	7 21	5 04	9 14	7 05	5 18	9 20	3 26	12 23	♈	☿ south,		1 0 e.
25	W	7 13	5 13	10 18	7 21	5 05	10 16	7 05	5 20	10 18	4 10	12 37	♈	♂ south,		4 13 m.
26	T	7 13	5 14	11 17	7 20	5 06	11 17	7 04	5 21	11 16	4 53	12 50	♉	♂ ☤ ☾	26	3 27 e.
27	F	7 12	5 15	mo'n	7 19	5 08	mo'n	7 04	5 22	mo'n	5 35	13 02	♉	♃ south,		8 35 e.
28	S	7 11	5 16	0 15	7 18	5 09	0 18	7 03	5 23	0 12	6 17	13 14	♉	☽	28	7 36 m.

Fourth Sunday after Epiphany—MATT. VIII, 24.

29	S	7 10	5 17	1 12	7 17	5 10	1 17	7 03	5 24	1 08	7 01	13 24	♉	☿ stationary,	29	6 4 e.
30	M	7 09	5 18	2 10	7 16	5 12	2 16	7 02	5 26	2 04	7 46	13 34	♊	♄ south,		9 45 m.
31	T	7 08	5 19	3 07	7 15	5 13	3 15	7 01	5 27	3 00	8 34	13 43	♊	♂ ♃ ☾	31	1 19 e.

CONJECTURES OF THE WEATHER.—1–3, cold and stormy, with much snow near the lakes and rain in Tennessee; 4–7, clears off, with wind from southwest; 8–11, clear and cold; 12–15, weather moderating; 16–19, cloudy, with easterly winds; 20–23, thawing, and perhaps rain; 24–27, snow-storm, with high winds from the west; 28–31, clears off, and the month ends with pleasant Winter weather.

MORNING AND EVENING STARS.—Venus is the evening star, setting at the beginning of the month half an hour after the Sun, and moving away from the Sun at a rate of little over one minute per day. Mars rises about sunset. Jupiter passes the meridian at 10 o'clock, evening, and being at its greatest northern declination, is a brilliant object in the evening. Saturn is not visible this month.

The Philalethian Society,

OF THE

Oxford College,



To Hereby Certify, *That* Martha M. Williamson, *a Graduate of this Institution, is a member of this Society, and has by her Literary Attainments and amiable deportment, won the esteem and affectionate regards of all her associates.*

We Therefore *take pleasure in recommending her to the confidence and kindness of all among whom her lot may be cast.*

, President.

SOCIETY HALL, , 187 . , Secretary.

Union Central Advocate.

CHAMBERLIN, CIN.

VOL. II. CINCINNATI, SEPTEMBER, 1870. No. 8.

THE UNION CENTRAL ADVOCATE

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Per Square, six times, ... 6 00
Per Square, twelve times, ... 9 00

Printed at the Western Methodist Book Concern.

HAVE PATIENCE.

A YOUTH and maid, one Winter night,
Were sitting in the corner;
His name, we 're told, was Joshua White,
And hers was Patience Warner.

Not much the pretty maiden said,
Beside the young man sitting;
Her cheeks were flushed a rosy red,
Her eyes bent on her knitting.

Nor could he guess what thoughts of him
Were to her bosom flocking

tone of voice. "Now, I call that taking trouble for nothing. What 's the great difference whether it takes three years or six to pay off the mortgage, so it 's paid off at last, and we have a comfortable home all the while?"

Her husband dropped his eyes to the floor, and sat in thought for a good while.

"Jenny," he said, looking up at length, "there 's one way to make things safe. I could get a life insurance for one or two thousand dollars."

He saw his wife's cheeks grow instantly pale.

"O! no," she exclaimed quickly, "I would n't do that. The very thought sends a cold shiver all over me."

"Thousands of people get their lives insured," said Mr. Bonfield.

"It 's of no use, Henry," she answered. "I would n't have a moment's peace from the day your life was insured."

"I am sorry you feel so," replied the husband. "It would set my mind at ease in regard to the mortgage."

"Do n't trouble yourself about that," said Mrs. reception of a legal paper giving notice that the balance of money due on the house must be paid by a certain date, or it would be sold in satisfaction of the mortgage.

The extremity of her situation quickened into life all the energy of Mrs. Bonfield's nature. She looked at her three fatherless children, then at her small, weak hands, by which alone their bread was to be wrested from the world, and then upward to God for guidance and help. For a whole day after receiving the legal notice she cast about, helpless in her mind, for a means of escape from the threatened danger.

In her painful suspense and anxiety she went to the man who held the mortgage, and telling him her plans, besought him to let the debt lie for one year, and sell then if she could not pay the interest and a part of the debt. But he would listen to nothing. The chance had come to make gain of oppression, and he would not let it pass.

The poor widow went back in despair to her children and sat down among them, weeping and wringing her hands. Her oldest child, a girl six years of age, tried to tell her something, but her ears were

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CASES OF EVERY DESCRIPTION,

For all grades of American Movements, all Styles and Patterns, Quality varying from 10 to 18 karat.

PRICES FOR MAKING GOLD CASES:

American, weighing 60 dwt. or less, Plain Engine Turned,	$13 00
Imported, " 60 " " " " "	16 00
Extra for each additional ounce,	2 00

EXTRA CHARGE FOR ENGRAVING AND ENAMELING.

The Standard Rates in Gold will be charged:

10 karat Gold, per dwt	48 cts.
12 " " "	56 "
14 " " "	64 "
16 " " "	72 "
18 " " "	80 "

All kinds of Imported Movements Cased in Gold or Silver, in any manner and style desired:

Special attention given to Case Repairing.

PLAIN GOLD RINGS.

Prices in Gold, in quantities, as follows:

	Less than 100 dwt.	100 dwt. or over.	300 dwt. or over.
14 karat, per dwt.	85 cts.	80 cts.	75 cts.
16 " "	92 "	87 "	82 "
18 " "	$1 00	95 "	90 "

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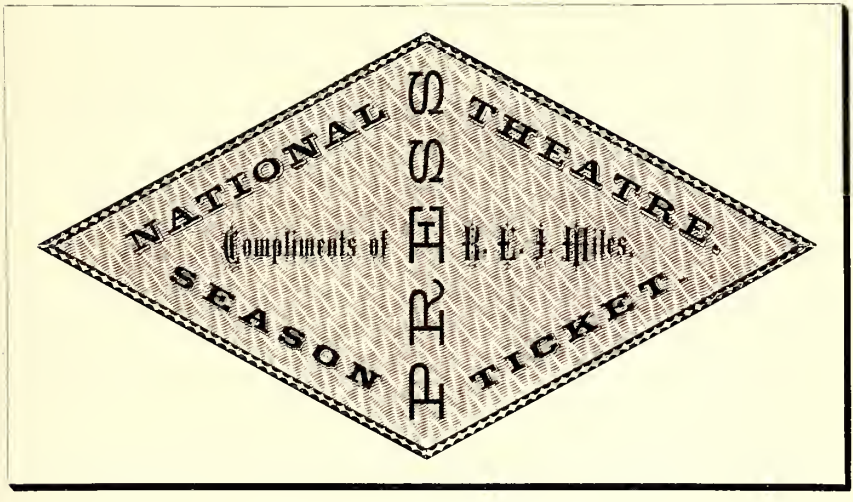
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rying. He is a clever young man, and I see no objection. He is very unlike his fanatic uncle."

He might have talked an hour without receiving a reply. Catherine's manner had changed; there was no longer the emotion or the blush. "What shall I tell him?" "Any thing you please," said she, "so that I never see him again." "Why, this is strange," said Luther; "you did not seem to have scruples of conscience just now. My dear Catherine, you must not forget that you have no natural relations here, and this young man can be a protector to you." "I wish you would not speak of him," replied she. "Is there any one else that you like better?" said Luther. She made no reply. "Nay, speak; I have every disposition to serve you. Has any other person made the same proposition to you?" "Yes," said Catherine, with a little womanly pride; "Counselor Baumgartner has made the same proposal." "Do you prefer him?" "Yes," she replied, rising; "but I am as happy as I ever expect to be. My friends assure me that I am no burden, but a help to them; so I wish you good morning."

Poor Catherine hastened to her room. Her dream was over. Luther, the austere, the insensible reformer, had awakened her from it. Margaret entered while her eyes were yet red with weeping. She tenderly approached, and embraced her; but neither exchanged a word. "There is no hope for Bodenstein," thought Luther; "it is evident Baumgartner is the object. Catherine is a child. If the Elector dies she is without a support, except by the labor of her hands, and they do not look as if they were made for labor. I will write to Jerome Baumgartner. He is well known as a young counselor at Nuremberg." The young counselor received this letter with surprise and incredulity. The positive refusal of Catherine, some months before, had left no doubt on his mind, and he thought the wisest plan was to inclose the letter to her, and to inquire whether it was written with her sanction. In the mean time Luther's friends began to urge

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Still doubtful about the value—not to say necessity—of Accidental Insurance? Look about you, and see the benefits that have accrued to those who were

Insured Against

Accidents, and who, when disabled, were so fortunate in having a Policy that covered all

Accidents?

issued by the Accident Insurance Company, of Tipton, Minn. Make inquiries of the fortunate possessor, and you will find that by prompt payment and honorable dealing, the Company has made a good name in the land.

If Not,

Yet satisfied, take a policy yourself, and experience the sense of relief and safety which always attends the possessor of an Accident Policy in this excellent Company. At home or abroad, traveling or stationary, you *feel safe*, and ready to exclaim

Why Not?

have attended to this before? Sure enough. It was not the fault of the Company that you were not. It is not now too late. Call on the Agent at once, and procure a policy.

TABLES SHOWING THE COST OF INSURANCE.

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For Merchants, Professional Men, Bankers, and all others who follow an occupation not in itself Hazardous to Life or Limb.

					PER YEAR.
$1,000	if killed,	$5.00	per week if	disabled,	costs $ 5.00
3,000	"	15.00	"	"	" 15.00
5,000	"	25.00	"	"	" 25.00

IN SAME RATIO TO $10,000.

SECOND CLASS.

For Railroad Conductors, Persons Liable to Extra Travel, Traveling Agents, Mail Agents, Mechanics, Laborers, Farmers, Millers, and all others of this Class.

					PER YEAR.
$1,000	if killed,	$5.00	per week if	disabled,	costs $ 7.50
3,000	"	15.00	"	"	" 22.50
5,000	"	25.00	"	"	" 37.50

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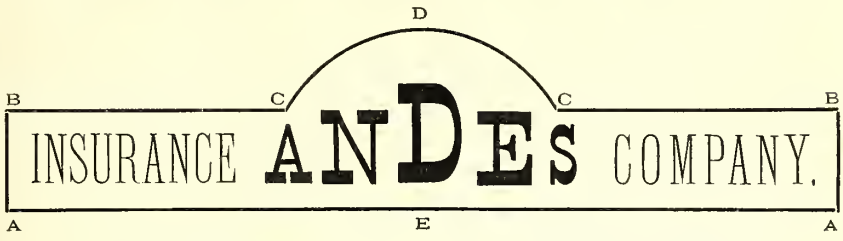
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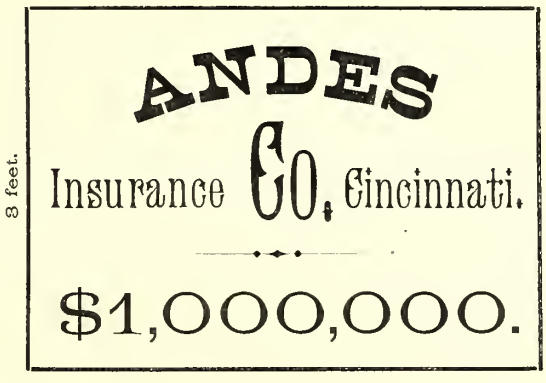
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A to B, 22 inches.
C to C, 6 feet, 3 inches.
D to E, 2 feet, 10 inches.





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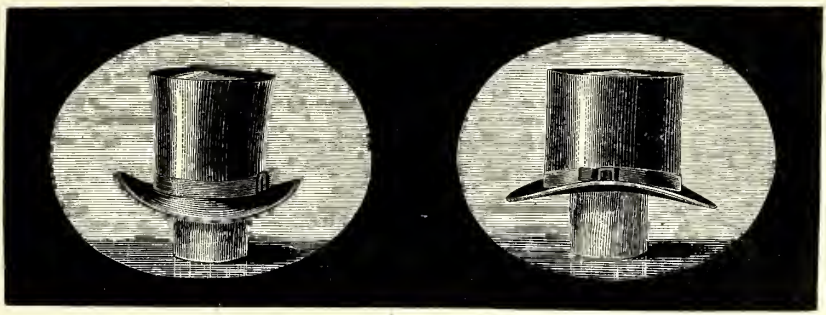
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CROWN—6⅛ deep.
TIP—7¾ by 7⅜.
BELL—¼, 1-16 sides; ⅛ front and rear.
BRIM—2⅛ front and rear, ⅛ off at sides.
BAND AND BINDING, 10 line.

We take pleasure in calling your attention to the Trade Fall Style of Silk Hat, and would state that our facilities for manufacturing are such as will enable us to produce first-class goods at reasonable prices. We are making several grades, ranging in prices as follows, viz:

$48, $51, $54, $57, $60, $66, $72, and $84, per doz.

NET CASH.

An early order from you is respectfully requested, and a single Hat will be sent as sample, when desired.

Very Truly Yours,

August 25th, 1870.

P. & W.

THE

Cincinnati Weekly Times

ONE OF

THE OLDEST FAMILY JOURNALS IN THE WEST,

Is about commencing its Twenty-Eighth Volume.

IT IS CONCEDED TO BE ONE OF THE

HANDSOMEST & BEST NEWSPAPERS

IN THE UNION.

It is devoted to the Home Circle, the Counting Room, and the Work Shop.
It is "Independent in all things, Neutral in nothing."

It publishes only what is Reliable, and speaks only what is Truthful, making it the Journal which the Parent may, without fear, place before his Family.

WE would also call attention to the new feature, which has given such universal satisfaction to our patrons for several years past, viz:

AN ANNUAL PRESENT

TO EVERY SUBSCRIBER OF

THE ILLUSTRATED UNION HAND-BOOK,

A large octavo volume of 112 pages; its columns being full of valuable statistics, tables, and fresh and instructive reading matter on different subjects, of interest to the Farmer, the Merchant, and the Mechanic. Especial attention has also been paid to the Household and Health Departments, which will be of great interest to the Women Folks; and even the Young Folks will find several columns devoted to them, that will afford both pleasure and profit. The most interesting feature of the Hand-Book will be its illustrations, of which there will be at least FIFTY; many of these have been engraved specially for it, in the most artistic style, illustrating the

River, Lake and Mountain Scenery of the West;
Domestic Subjects, illustrative of Home Life;
The Wonders of the Yosemite Valley,

Giving engravings of some of the most romantic and beautiful scenery in the world. Also, several pictures showing the greatest curiosities of Tree and Forest growth:

The Big Tree of Penang;
The Cedars of Lebanon;
The Great Chestnut Tree of Mount Etna;
The Dragon Blood Tree, &c., &c.

Take it all in all, we venture the assertion that our seventy thousand subscribers will unanimously pronounce it to be worth at least half the subscription price of the paper.

To those persons who have never seen the WEEKLY TIMES, we will take pleasure in sending a specimen copy on application.

TERMS:

Single Subscribers, - $2.00 per year.
Clubs of Ten, - - 1.50 " "
and one to the Club Agent.

Address,

C. W. STARBUCK & CO.
No. 62½ West Third Street.
CINCINNATI, O.

FURNISHED BY "TIMES" JOB OFFICE, CINCINNATI — O. F. CARNAHAN, MANAGER.

XXXI.—FORTY YEARS AGO.



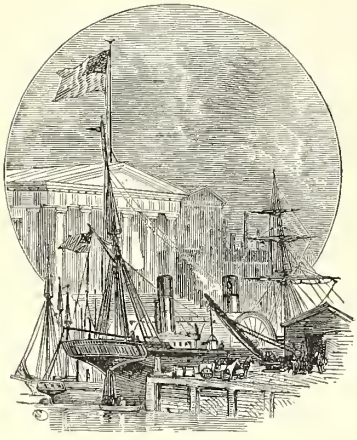
I 've wandered to the village, Tom,
I 've sat beneath the tree,
Upon the school-house play-ground,
That sheltered you and me;
But none were left to greet me, Tom
And few were left to know,
Who played with us upon the green
Just forty years ago.

The grass was just as green, Tom,
Barefooted boys at play
Were sporting, just as we did then,
With spirits just as gay.
But the master sleeps upon the hill
Which, coated o'er with snow,
Afforded us a sliding-place,
Some forty years ago.

From Wilson, Hinkle & Co., Cincinnati, Publishers of the Eclectic Educational Series.

CUSTOMS OR DUTIES.

267. ***Customs*** are taxes levied by the national government on imported goods and the tonnage of vessels. Customs are also called *Duties.*



Ports of Entry for foreign goods are established by law, and at each port of entry there is a *Custom House*, where customs or duties are collected. The officer in charge of the custom house is called the *Collector of Customs*, and a list of the rates of duties to be collected, is called a *Tariff.*

Duties are *Specific* or *Ad Valorem.*

268. ***Specific Duties*** are customs assessed on the quantity of goods imported, without reference to their value.

In assessing specific duties an allowance is made (1) for waste, called *Draft;* (2) for the weight of box, cask, etc., called *Tare* or *Tret;* (3) for waste of liquids, called *Leakage;* and (4) for the breaking of bottles, called *Breakage.* The weight of goods before allowances are made is called *Gross Weight*, and the weight after all allowances are made is called *Net Weight.*

269. ***Ad Valorem Duties*** are customs assessed on the cost of goods in the country from which they are imported.

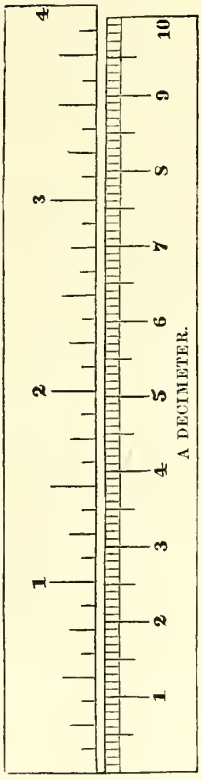
The cost of imported goods is shown by an *Invoice* or *Manifest*, and when the currency of the country from which goods are imported has a depreciated value, the amount of depreciation is stated in a consular certificate, attached to the invoice. When the owner or consignee can not exhibit an invoice of goods at the custom house. their value is determined by appraisement.

From Wilson, Hinkle & Co., Cincinnati, Publishers of the Eclectic Educational Series.

COMPLETE ARITHMETIC.

METRIC TABLES.

182.—I. Measures of Length.



The Unit is a Meter = 39.37 *inches, nearly.*

Denominations.		Values.		Equivalents.
Myriameter	=	10000	meters	= 6.2137 mi.
Kilometer	=	1000	meters	= 0.6214 mi.
Hectometer	=	100	meters	= $328\frac{1}{12}$ ft.
Decameter	=	10	meters	= 393.7 in.
Meter	=	1	meter	= 39.37 in.
Decimeter	=	.1	meter	= 3.937 in.
Centimeter	=	.01	meter	= 0.3937 in.
Millimeter	=	.001	meter	= 0.0394 in.

Decimal Scale.

Myriameter.	Kilometer.	Hectometer.	Decameter.	Meter.		Decimeter.	Centimeter.	Millimeter.
0	0	0	0	0	.	0	0	0

Ten units of any denomination of the above table equal one unit of the next higher denomination, and, hence, the successive denominations correspond to successive orders of figures in the decimal system: the meter denoting units; the decameter, tens, etc.

The correspondence between the metric denominations and those of United States Money is also noticeable. The *millimeter* corresponds to mills; the *centimeter* to *cents;* the *decimeter* to *dimes;* the *meter* to *dollars*, etc.

The above diagram shows that a decimeter is a little less than four inches, and that a centimeter is a little more than $\frac{3}{8}$ of an inch.

Note.—As no abbreviations for the names of the metric units have been agreed upon in this country, the names are given in full in this work. The tables of equivalents need not be memorized by the pupil.

From Wilson, Hinkle & Co., Cincinnati, Publishers of the Eclectic Educational Series.

A

COMPLETE

ALGEBRA

FOR

SCHOOLS AND COLLEGES,

BY

A. SCHUYLER, M. A.,

Professor of Mathematics and Logic in Baldwin University; Author of Higher Arithmetic and Principles of Logic.



CINCINNATI:
WILSON, HINKLE & CO.
NEW YORK; CLARK & MAYNARD.

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91. Examples.

1. Reduce $\frac{a^2-b^2}{a^2+2ab+b^2} = \frac{(a+b)\ (a-b)}{(a+b)\ (a+b)} = \frac{a-b}{a+b}$.

2. Reduce $\frac{a^2-b^2}{a^2-2ab+b^2}$. *Ans.* $\frac{a+b}{a-b}$.

3. Reduce $\frac{a^2-2ab+b^2}{a^3-b^3}$. *Ans.* $\frac{a-b}{a^2+ab+b^2}$.

4. Reduce $\frac{x^2+2xy+y^2}{x^3+y^3}$. *Ans.* $\frac{x+y}{x^2-xy+y^2}$.

5. Reduce $\frac{x^2+13x+42}{x^2+14x+48}$. *Ans.* $\frac{x+7}{x+8}$.

6. Reduce $\frac{x^4-y^4}{x^6-y^6}$. *Ans.* $\frac{x^2+y^2}{x^4+x^2y^2+y^4}$.

7. Reduce $\frac{x^3-3x^2y+3xy^2-y^3}{x^3-x^2y-xy^2+y^3}$. *Ans.* $\frac{x-y}{x+y}$.

8. Reduce $\frac{x^2+(a+b)\,x+ab}{x^2+(b+c)\,x+bc}$. *Ans.* $\frac{x+a}{x+c}$.

9. Reduce $\frac{(a+b)^2+(a-b)^2}{a^4-b^4}$. *Ans.* $\frac{2}{a^2-b^2}$.

10. Reduce $\frac{x^4-px^3+(q-1)\,x^2+px-q}{x^4-qx^3+(p-1)\,x^2+qx-p}$.

Ans. $\frac{x^2-px+q}{x^2-qx+p}$.

92. Case II.

To reduce entire or mixed quantities to fractions.

1. $a = \frac{a}{1} = \frac{ad}{d}$, by multiplying both terms by d.

2. $a + \frac{n}{d} = \frac{ad}{d} + \frac{n}{d} = \frac{ad+n}{d}$.

3. $a - \frac{b-c}{d} = \frac{ad}{d} - \frac{b-c}{d} = \frac{ad-b+c}{d}$.

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SELECTIONS.

CHAPTER II.

SELECTIONS FOR READING.

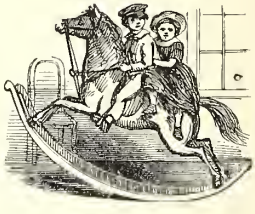
Exercise I.



Is it an ox?
It is an ox.
Is it my ox?
It is my ox.

Go on, go on, ox, do go on.

Do we go?
Do we go up?
We do go up.
Ah! so we do.





Am I in?
Am I in it?
I am in it.
Oh! so I am.

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COMPLETE ARITHMETIC.

2. MEASURES OF SURFACES OR AREAS.

Square Measure.

The denominations are *square inches, square feet, square yards, square rods* (or *perches*), *roods, acres,* and *square miles.*

Table.

144 *sq. in.* = 1 *sq. ft.*
9 *sq. ft.* = 1 *sq. yd.*
30¼ *sq. yd.* = 1 *P.*
40 *P.* = 1 *R.*
4 *R.* = 1 *A.*
640 *A.* = 1 *sq. mi.*

Surveyor's Measure.

Table.

7.92 *in.* = 1 *link* (*l.*).
25 *l.* = 1 *rod.*
4 *rd.* = 1 *chain* (*ch.*)
80 *ch.* = 1 *mile.*

Also:

625 *sq. l.* = 1 *P.*
16 *P.* = 1 *sq. ch.*
10 *sq. ch.* = 1 *A.*
640 *A.* = 1 *sq. mi.*
1 *sq. mi.* = 1 *section.*
36 *sect.* = 1 *township.*

3. MEASURES OF SOLID CONTENTS OR CAPACITY.

Cubic Measure.

The denominations are *cubic inches, cubic feet,* and *cubic yards.*

Table.

1728 *cu. in.* = 1 *cu. ft.*
27 *cu. ft.* = 1 *cu. yd.*

Wood Measure.

Table.

16 *cu. ft.* = 1 *cord ft.*
8 *cd. ft., or* 128 *cu. ft.* = 1 *cord.*

24¾ *cu. ft.* = 1 *perch of stone.*
40 *cu. ft. round timber* = 1 *ton.*
50 *cu. ft. hewn timber* = 1 *ton.*

Dry Measure.

The denominations are *pints, quarts, pecks,* and *bushels.*

Table.

2 *pt.* = 1 *qt.*
8 *qt.* = 1 *pk.*
4 *pk.* = 1 *bu.*

Liquid Measure.

Table.

4 *gills* = 1 *pt.*
2 *pt.* = 1 *qt.*
4 *qt.* = 1 *gal.*
31½ *gal.* = 1 *bbl.*
63 *gal.* = 1 *hhd.*
42 *gal.* = 1 *tierce.*

Note.—The standard bushel contains 2150⅖ cu. in.; the liquid gallon, 231 cu. in.; and the beer gallon (little used), 282 cu. in.

From Wilson, Hinkle & Co., Cincinnati, Publishers of the Eclectic Educational Series.

145. **Recapitulation.**

The *altitude of the celestial pole* is found from the *culminations of circumpolar stars.*

Correction is required for *atmospheric refraction;* it *increases* the apparent altitude of a celestial object, especially when *near the horizon.*

Terrestrial latitude is found:

1. By *culminations* of *circumpolar stars;*
2. By *meridian altitude* of the *sun* ± *declination.*

Day = night		
At the *equator*, where	the sun's daily path is	*perpendicular* to the horizon.
At the *poles*, where		*parallel* to the horizon.
Elsewhere, when		on the *equinoctial.*
Day > night		
Elsewhere, when		in the *observer's* hemisphere.
Day < night		
Elsewhere, when		in the *opposite* hemisphere.

Twilight is caused by *reflection* of light from upper region of atmosphere; it lasts until the sun is 18° below the horizon.

CHAPTER VIII.

SHAPE OF THE EARTH. GRAVITATION.

146. **Public surveys.**—The construction of accurate maps is a matter of national importance. When a boundary line between two states or nations is not fixed by some natural landmark, as the channel of a stream or the crest of a mountain, it is often made at lines of latitude and longitude; these must be determined astronomically. The bounds of many of the states and territories, as well as those between the United States and the British Provinces and Mexico, are fixed at astronomical lines.

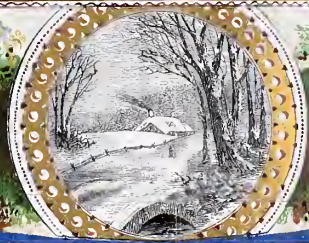
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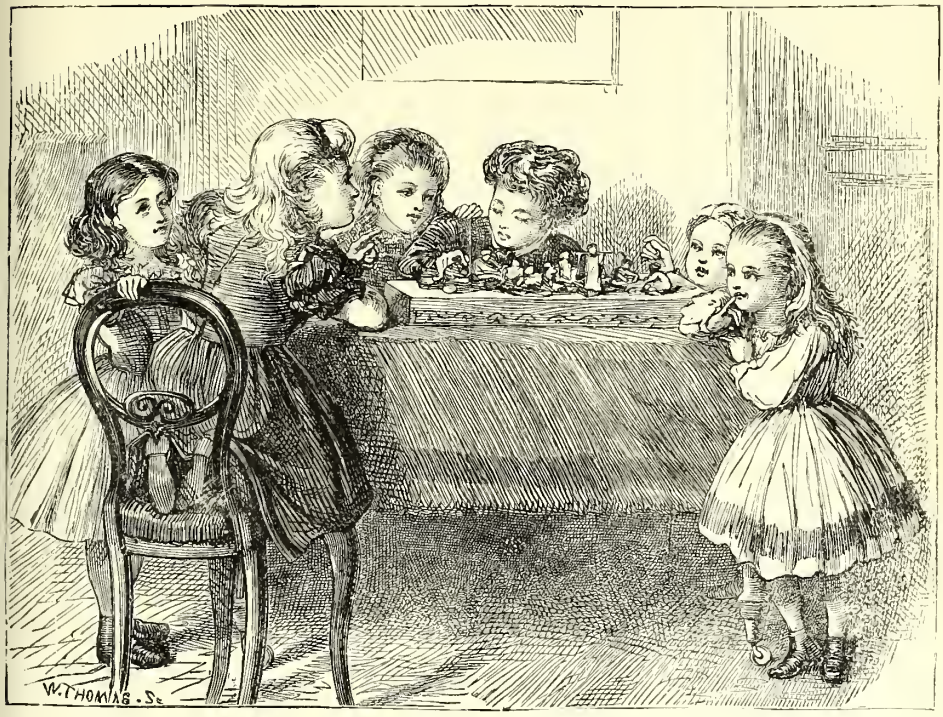
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SUPERINTENDENT.

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LITTLE EYES AND LITTLE HANDS.

LITTLE eyes,
Like the shining blue above,
Full of light and love,
Full of glee;
Telling of a life within,
In a world of sin,
Born to you and me!
Will they see the golden way
Leading up to day?
And the God to whom we pray,
In the skies?

Little hands,
In the long and weary strife
Of a toiling life,
Will they win?
Will they early learn to bless?
Rescue from distress?
Will they fear to sin?
For the true, the good, the right,
Will they bravely fight?
Strew along the paths of night
Golden sands?

Little feet,
Entered on a thorny way;
Will it lead to day
And renown?
As its rugged steeps are trod,
Will they climb to God
And a seraph's crown?
Where the loving Savior goes,
Finding friends or foes,
Will they follow till life's close,
As is meet?

Little eyes,
May they wear an angel's guise
In the upper skies!

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AT ADVENT CHURCH,

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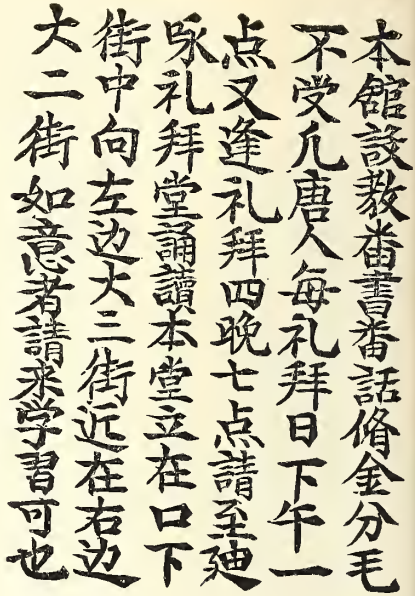
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WITHOUT CHARGE.

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Says our good friend and an excellent printer—MR. WM. M. CUBERY, of *San Francisco, Cal.*—who kindly sent us, *by letter*, the electrotype shell from which the Chinese presented above is printed:—

"The above is a *fac-simile* of the cards issued by the Church of the Advent, San Francisco, and printed on bright red paper by CUBERY & Co., inviting the Chinese here to attend its School for them. Most of the Protestant Churches of the city have similar Schools. Each pupil requires a teacher; and it is an interesting sight to see well-dressed white ladies or children sitting beside these dark sons of the East and teaching them the English alphabet. But the faithful are amply rewarded for their labors when they hear these heathen people repeating the Lord's Prayer, Ten Commandments, or passages from the Scriptures. They also learn to sing psalms and hymns.

"In reading the Chinese characters commence at the right side and read downward."

THEODORE ROYER, *President.* S. E. HIBBARD, *Secretary.* A. HAVEN, *Superintendent.*

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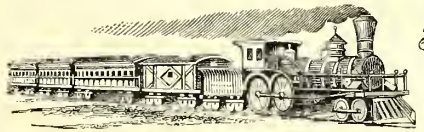
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the following articles, contents of packages unknown, marked as below, which are to be delivered in like good order, at .....

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at the rate of .....

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	Bundles Wheels,	
	" *Felloes,*	
	" *Hubs,*	

OR, BOOK OF SPECIMENS.

— 211 —

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Millcreek Division No. 336, Sons of Temperance.

Cumminsville, ... *187* .

You are in arrears to division for ..... *months' dues* ..... *dollar and* ..... *cents.*

Please remit within thirty days, or give your reasons for not doing so, so I can report to division.

And Oblige Yours,

.....

Financial Scribe.

LAWS.
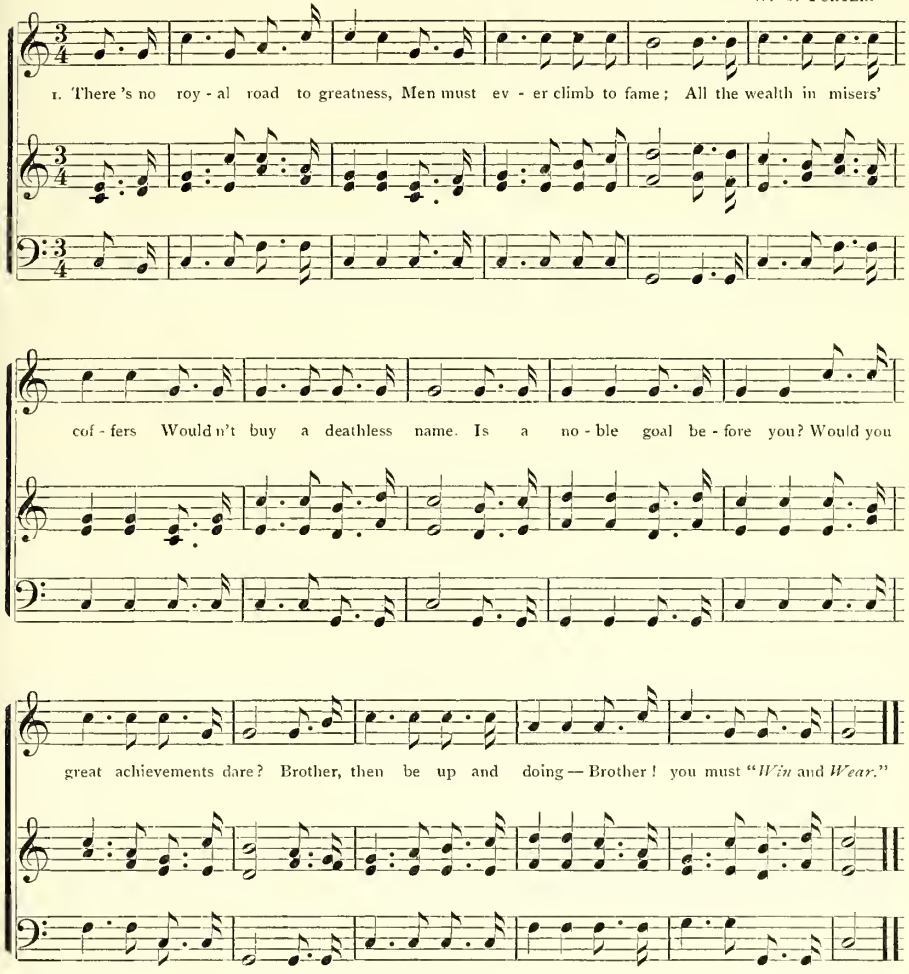
CHAPTER V.—Page 9.

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WIN AND WEAR.

W. T. PORTER.



2. Toil and labor—never stopping
Till you make the prize your own,
For you know, 't is "constant dropping
Wears away the hardest stone."
Never slack sublime endeavor,
Nor 'mid cheerless toil despair;
If you 'd rise above your fellows,
Brother! you must "Win and Wear."

3. 'T is the lesson Nature teaches
All throughout her wide domain;
And the text from which she preaches
Is "that labor leads to gain."
Moral worth and honest merit—
Brighter crowns than monarchs bear—
These you never can inherit:
Brother! these you "Win and Wear."

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— OF —

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THURSDAY, JUNE 23d, 1870.

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Scientific Class.

Prayer.

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SHERRY.

Old Duff Gordon,	3 00
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South Side,	3 00

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Saudeman,	3 00

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Best Jamaica,	3 00
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Irish,	3 00

GIN.

Grape-leaf,	3 00
Genuine Old Tom,	2 00

ALE, PORTER, &c.

Younger's Edinburgh Ale,	50
Barclay Perkin's Porter,	50
Guinness' Stout,	50
American Ales and Porters,	25
Kissingen Water,	15

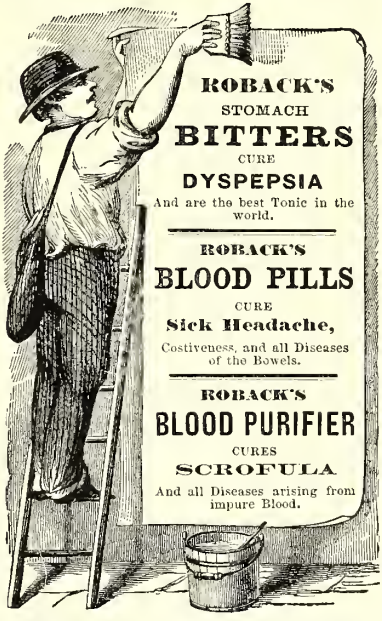
ROBACK'S STOMACH BITTERS BLOOD PURIFIER

Roback's Stomach Bitters, unlike all other Bitters in the market, possess intrinsic merit. Most Bitters, so called, are merely wishiwashy stuff, sold as a beverage. Dr. Roback's Bitters are not a beverage in any sense of the word, but contain the most expensive drugs known to science for the radical cure of Indigestion and Dyspepsia, and for all cases where a tonic and stimulant are required. They restore the vital forces in a remarkable degree, and give tone to the system.

It is now eleven years since Dr. Roback, the celebrated Swedish physician, from Stockholm, Sweden, came to this country and introduced the Scandinavian Blood Purifier; since which time thousands have been cured, by its use, of Scrofula and other blood diseases. It contains, besides the Iodide of Potassa and Syrup of Stillingia, drugs imported from Sweden for its express manufacture, unknown and not kept by apothecaries in this country. A single trial will convince the most skeptical of its wonderful value.

Dr. Roback's Blood Pills are unsurpassed by any Pill manufactured for a similar purpose.

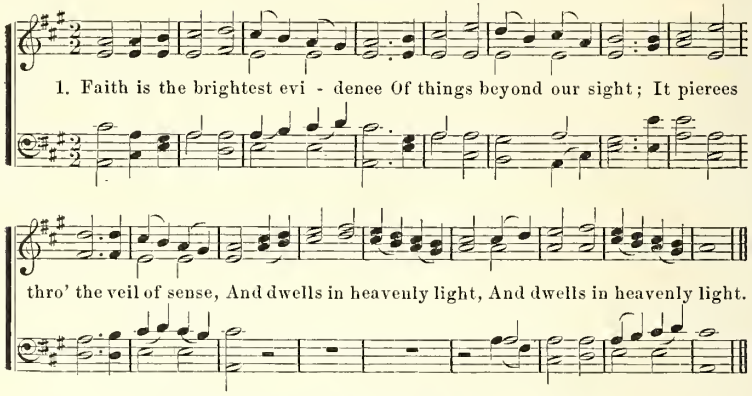
TOSSPETTI'S
CELEBRATED
VENITIAN SOAP
FOR THE COMPLEXION.
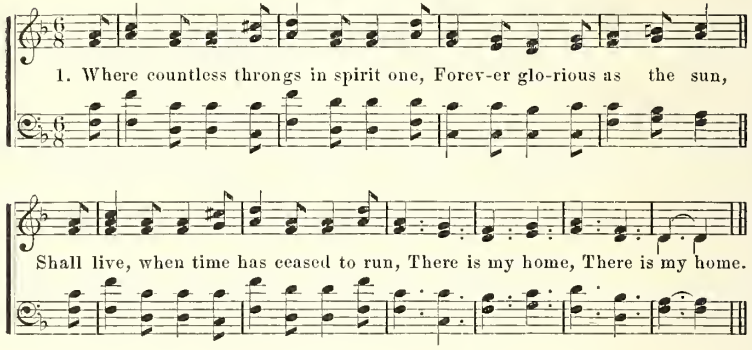


U. S. PROP. MED. CO.
Sole Proprietors,
Nos. 56 & 58 East Third Street,
CINCINNATI, OHIO.

FOR SALE BY DRUGGISTS EVERYWHERE.
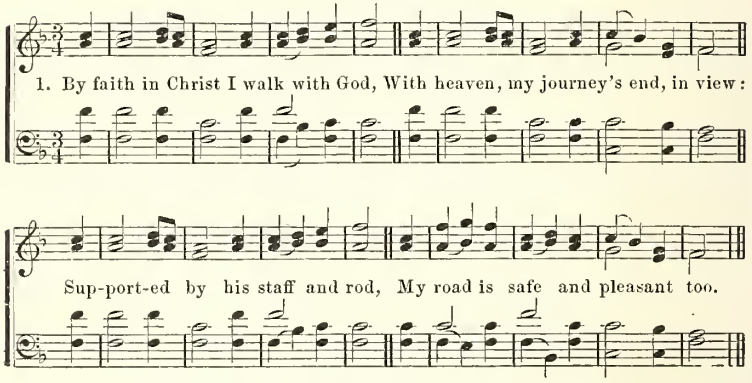
50 **DEVIZES. C. M.**



WHERE IS MY HOME? 8s & 4.



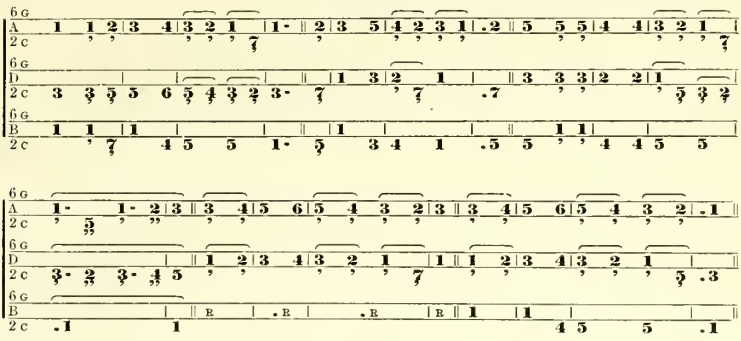
No. 700. L. M. S. W. L.



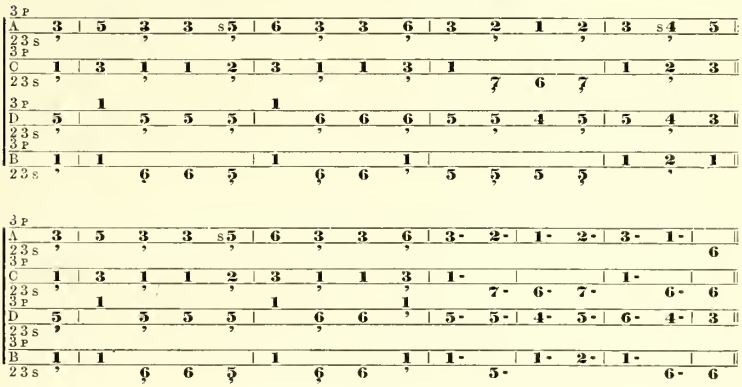
EXCELSIOR MUSIC, FROM FRANKLIN TYPE FOUNDRY, CINCINNATI.
G. K. Tenney, Compositor.

50

DEVIZES. C. M.
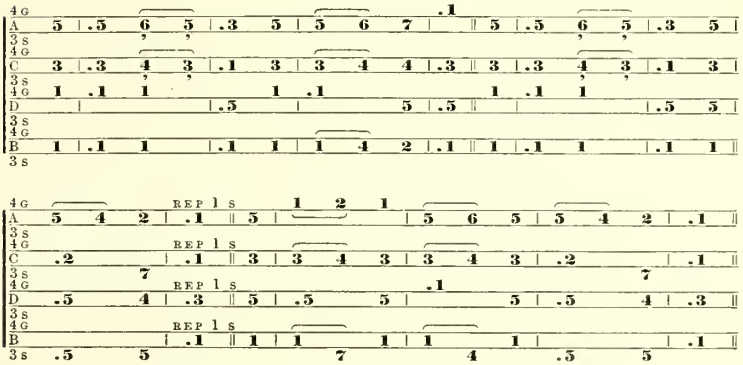


WHERE IS MY HOME?

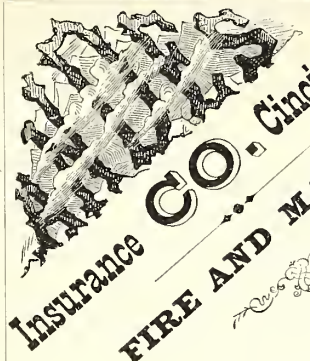


No. 700. L. M.

S. W. L.



DIAMOND NUMERAL MUSIC, FROM FRANKLIN TYPE FOUNDRY, CINCINNATI.
Jas. A. Waring, Compositor



J. B. BENNETT, Pres't. } J. H. BEATTIE, Sec'y.
J. J. BERNE, Sup't of Agencies.

CASH CAPITAL:

$1,000,000.00.

EVERETT & DOUGLASS,
Agents,
CLEVELAND, OHIO.

Williams & Combs
Cincinnati
Ohio

Harpel's Typograph

(MINIATURE INSURANCE POLICY)

No. $

INSURANCE CO. CINCINNATI.

By this Policy of Insurance, the **Andes Insurance Company,** *in consideration of* 100 *Dollars, to them paid by the assured hereinafter named, the receipt whereof is hereby acknowledged,*

Do Insure , *of* ,

Against Loss or Damage by Fire or Lightning.

To the Amount of **Dollars,**

for the term of

And the said Company do hereby promise and agree to make good unto the said assured ..... executors, administrators, and assigns, all such immediate loss or damage not exceeding in amount the sum insured, as shall happen by fire to the property, as above specified, from the ..... day of ....., one thousand eight hundred and seventy-....., (at 12 o'clock, at noon,) unto the ..... day of ....., one thousand eight hundred and ..... (at 12 o'clock at noon,) the said loss or damage to be estimated according to the true and actual cash value of the property at the time the same shall happen; and to be paid within sixty days after notice and proof thereof made by assured, in conformity to the conditions annexed to this Policy. PROVIDED, ALWAYS, AND IT IS HEREBY DECLARED, That this Company shall not be liable to make good any loss or damage by fire which may happen or take place by means of any invasion, insurrection, riot, or civil commotion, or of any military or usurped power, or any loss by theft at or after a fire. AND PROVIDED FURTHER, That in case the assured shall have already any other insurance against loss by fire, on the property hereby insured, and not notified to this Company, and mentioned in or endorsed upon this Policy, then this insurance shall be void and of no effect, (etc.)

This Policy shall not be valid until countersigned by the duly authorized Agent of said ANDES INS. CO. at .....

In Witness Whereof, The ANDES INSURANCE COMPANY have caused these presents to be acknowledged by the names of their President and Secretary, of the city of Cincinnati, and State of Ohio.

Countersigned at ....., this ..... day of ....., A. D. 187...

J. H. Beattie, **Secretary.** *J. R. Bennett,* **President.**

, *Agent.*

STAMP.

An Assignment requires same Stamp as Original Policy.

ASSIGNMENT.

THE ANDES INSURANCE COMPANY *hereby consent that the interest of*

..... *in the within Policy be assigned to*

..... *subject nevertheless to all the conditions herein contained.*

..... *187* . ..... *Agent.*

FOR VALUE RECEIVED, ... *hereby transfer, assign, and set over unto*

....., *and assigns, all* ..... *right, title,*

and interest in this Policy of Insurance, and all benefit and advantage to be gained therefrom.

Dated at ....., *this* ..... *day of* ....., *187* .

ROBERT ALLISON. CHAS. H. SMITH. HORACE L. JOHNSON.

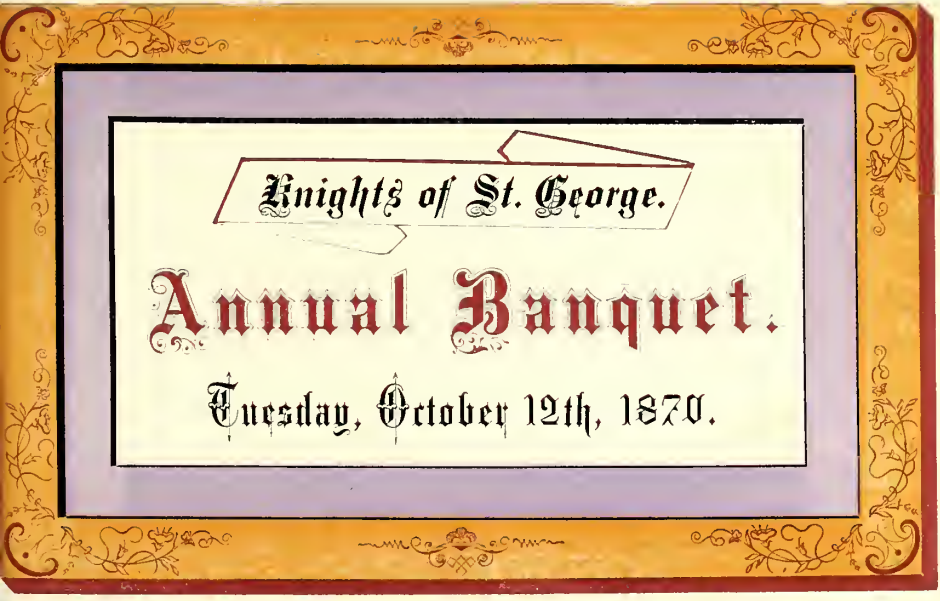
ALLISON, SMITH & JOHNSON,

PROPRIETORS OF

The Franklin Type Foundry,

No. 168 VINE STREET,

Everything First-class. CINCINNATI.



1870

JANUARY.

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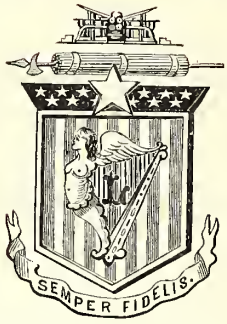
MAY.

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HARPEL



MERCANTILE

JOB

PRINTER

58

West Fourth Street,

North Side,

CINCINNATI, O.

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Artistic Designs

— AND —

First-Class Material,

— AT —

REASONABLE PRICES.

JULY.

S	M	T	W	T	F	S
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OCTOBER.

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NOVEMBER.

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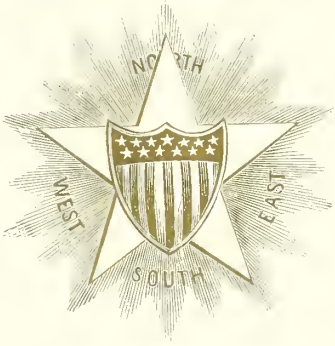
DECEMBER.

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FOR PRESIDENT:



Hon. HORATIO SEYMOUR.



FOR VICE-PRESIDENT:



Gen. FRANK P. BLAIR.

For President of the United States,



Gen. U. S. Grant.



For Vice President of the United States,



Hon. Schuyler Colfax.

Dedication.

WILLIAM H. ALLEN, LL. D.,

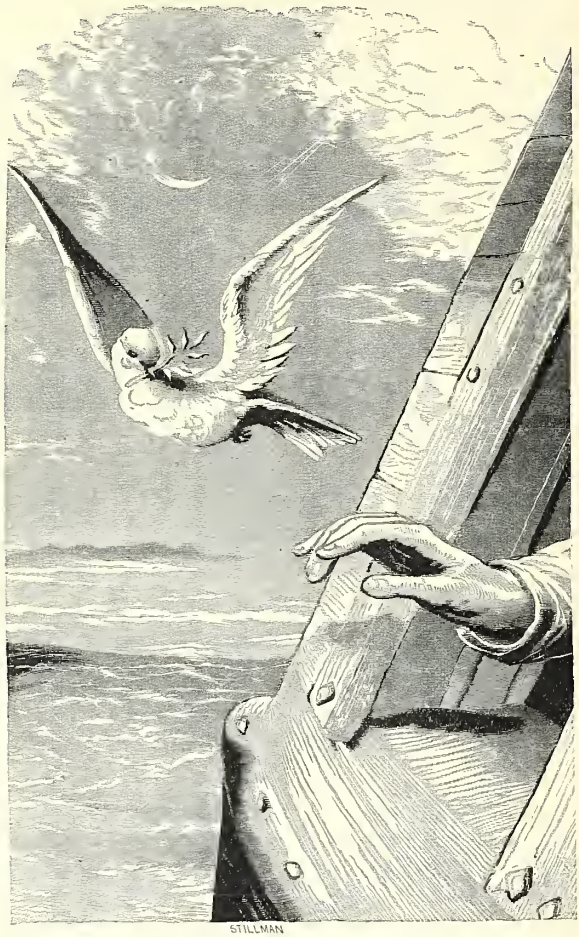
President of Girard College.

My Friend and Classmate:

TWO *reasons have specially prompted me to place your name in this little volume. One is the fact that you have so long and so successfully devoted your eminent abilities to the education and welfare of youth—a work in harmony with the genius of this my humble effort; and another reason is founded upon those invariably pleasant relations, and that sincere friendship, which commenced with our college days, and upon which time and separation have, as I trust, exerted no disturbing influence.*

With profound and affectionate respect,

Charles Adams.



The above engraving was executed by Mr. GEO. K. STILLMAN, Wood Engraver, Cincinnati, with a Ruling Machine, and it is believed to be the only thing of the kind ever done on wood.

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Cincinnati, Ohio, *187*

227

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Viginia Rockford,

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Per Ream.	Per Quire.	Full Sheet.	10 to Sheet.	12 to Sheet.	15 to Sheet.	16 to Sheet.	18 to Sheet.	20 to Sheet.	24 to Sheet.
$11.00	$ .55	$24.20	$2.42	$2.02	$1.61	$1.51	$1.34	$1.21	$1.01
11.25	.56¼	24.75	2.47	2.06	1.65	1.55	1.37	1.24	1.03
11.50	.57½	25.30	2.53	2.11	1.68	1.58	1.40	1.27	1.05
11.75	.58¾	25.85	2.58	2.15	1.72	1.61	1.43	1.29	1.07
12.00	.60	26.40	2.64	2.20	1.76	1.65	1.46	1.32	1.10
12.25	.61¼	26.95	2.69	2.25	1.80	1.69	1.49	1.35	1.13
12.50	.62½	27.50	2.75	2.29	1.83	1.72	1.53	1.38	1.15
12.75	.63¾	28.05	2.80	2.34	1.87	1.75	1.56	1.40	1.17
13.00	.65	28.60	2.86	2.38	1.91	1.79	1.59	1.43	1.19
13.25	.66¼	29.15	2.91	2.43	1.94	1.82	1.62	1.45	1.21
13.50	.67½	29.70	2.97	2.47	1.98	1.85	1.65	1.49	1.23
13.75	.68¾	30.25	3.02	2.52	2.01	1.89	1.68	1.51	1.26
14.00	.70	30.80	3.08	2.57	2.05	1.92	1.72	1.54	1.28
14.50	.72½	31.90	3.19	2.65	2.13	1.99	1.77	1.59	1.32
15.00	.75	33.00	3.30	2.75	2.20	2.06	1.83	1.65	1.37
15.50	.77½	34.10	3.41	2.84	2.27	2.13	1.89	1.70	1.42
16.00	.80	35.20	3.52	2.93	2.35	2.20	1.95	1.76	1.46
16.50	.82½	36.30	3.63	3.02	2.42	2.27	2.01	1.81	1.51
17.00	.85	37.40	3.74	3.12	2.49	2.34	2.08	1.87	1.56
17.50	.87½	38.50	3.85	3.21	2.57	2.40	2.14	1.92	1.60
18.00	.90	39.60	3.96	3.30	2.64	2.47	2.20	1.98	1.65
18.50	.92½	40.70	4.07	3.39	2.71	2.54	2.26	2.03	1.69
19.00	.95	41.80	4.18	3.48	2.79	2.61	2.32	2.09	1.74
19.50	.97½	42.90	4.29	3.57	2.86	2.68	2.38	2.14	1.78
20.00	1.00	44.00	4.40	3.67	2.93	2.75	2.44	2.20	1.83
21.00	1.05	46.20	4.62	3.85	3.08	2.89	2.57	2.31	1.92
22.00	1.10	48.40	4.84	4.03	3.23	3.03	2.69	2.42	2.01
23.00	1.15	50.60	5.06	4.22	3.37	3.16	2.81	2.53	2.11
24.00	1.20	52.80	5.28	4.40	3.52	3.30	2.93	2.64	2.20
25.00	1.25	55.00	5.50	4.58	3.67	3.44	3.05	2.75	2.29
26.00	1.30	57.20	5.72	4.76	3.81	3.57	3.18	2.86	2.38
27.00	1.35	59.40	5.94	4.95	3.96	3.71	3.30	2.97	2.47
28.00	1.40	61.60	6.16	5.13	4.11	3.85	3.42	3.08	2.57
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30.00	1.50	66.00	6.60	5.59	4.40	4.13	3.66	3.30	2.75
Sheets Required for 1000 Copies.		1056 Sheets.	105 Sheets.	88 Sheets.	70 Sheets.	66 Sheets.	59 Sheets.	53 Sheets.	44 Sheets.
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A Plain Mitred Rule Border, not cut to order, should increase the price of the page 50 cents; if cut to order of specially selected rule, add the labor of mitering and the waste, which cannot be less than 50 cents additional, and may be $1.00. If the rule is of little service for other work charge half its cost.

A Rule Border Justified to fit rule corners is worth from 50 cents to $1.00.

A Border of Two Sets of Rules, one enclosed within the other, is worth from $1.50 to $2.00 for the labor, exclusive of value of rule.

A Plain Flower Border may be rated at 75 cents.

A Combination Border of the simplest pattern, and largest pieces, is worth $1.00. Elaborate Combination Borders on Minionette body are worth from $4.00 to $10.00 each. Combination Borders for Headings, at same price as for Note Circulars.

Electrotyping, with Blocking, of an ordinary Letter Circular, $5\frac{3}{4} \times 7\frac{3}{4}$ inches, is worth from $2.65 to $3.00.

PRESSWORK OF LETTER CIRCULARS.

Color of Ink.	100.	Every added 100.	500.	1000.	3000. per 1000.	6000. per 1000
ONE PAGE.	..	..	..	..	..	..
Black Ink	$ .50	$ .20	$1.25	$2.00	$2.00	$2.00
Blue, or ordinary Red	.75	.30	2.00	3.00	3.00	3.00
Fine Red, or Purple	1.00	.40	2.50	4.00	4.00	4.00
TWO, THREE, OR FOUR PAGES.	..	..	..	..	..	..
Black Ink	.75	.30	2.00	3.00	2.50	2.00
Blue, or ordinary Red	1.00	.40	3.00	4.50	3.75	3.25
Fine Red, or Purple	1.50	.60	4.00	6.00	5.00	5.00

For Woodcut Presswork, Presswork in Two Colors, or in Gold Bronze, or from New and Fragile Types, see remarks on page 125.

The prices for Fine Red or Purple are insufficient for the finest work and the best colors. Six Dollars per 1000 impressions on small forms, and Eight Dollars per 1000 on large forms, are not unreasonable prices where great brilliancy of color is required. If color is used in excess, these prices will be found inadequate.

Very thin or very rough papers require an increase in the price of presswork.

ESTIMATES IN DETAIL.

One-page Letter Circular.—Double Small Pica Script, Black ink, half sheet.

Items.	100.	500.	1000.	3000.	5000.	10,000. 2 set.
Paper, 6 lb., at 40 cts	$ .26	$1.32	$2.64	$7.92	$13.20	$26.40
Composition	2.50	2.50	2.50	2.50	2.50	5.00
Presswork	.50	1.25	2.00	6.00	10.00	10.00
Extra for new type.	.25	.50	.50	1.50	2.50	2.50
Total	$3.51	$5.57	$7.64	$17.92	$28.20	$43.90

If a full sheet Letter Circular is wanted, double the price in the item of Paper. If extra work is wanted on composition, add the extra to the item of Composition. If Blue is wanted, add one half to the item of Presswork. If Fine Red is wanted, double the item of Presswork. If Script type is not new, or is of durable face, deduct the item of Extra for New Type.

PRESSWORK OF CHECKS IN BLACK INK.

Quantities.	One Cheek Set.					
	1 to page.	2 to page.	3 to page.	4 to page.	5 to page.	6 to page.
One Hundred impressions.....	$ .50	$1.00	$1.20	$1.50	$1.75	$2.00
Every added Hundred.....	.20	.25	.30	.35	.40	.40
Five Hundred impressions.....	1.25	2.00	2.40	2.90	3.25	3.60
One Thousand impressions	2.00	3.00	3.75	4.25	4.75	5.25
Every added Thousand.....	2.00	2.50	2.75	3.20	3.60	4.00
Five Quires of Double Cap, 12 to sheet, full size.....	3.00	4.10	5.00	..	6.00	7.00
Ten Quires of Double Cap.....	5.75	7.70	9.00	..	10.50	11.50
One Ream of Double Cap.....	11.50	12.50	14.40	..	19.20	23.00

For Red, Blue, Green, or Brown Ink, add one-fourth to these prices.
For Carmine or Purple, of best quality, add one-half to these prices.

PRESSWORK OF CHECKS IN BLACK INK.

Quantities.	Two Set.			Three Set.			4, 5, or 6 Set.
	2 to page.	4 to page.	6 to page.	3 to page.	5 to page.	6 to page.	
One Hundred impressions.	$ .50	$1.00	$1.50	$ .75	$1.50	$1.25	$ .75
Every added Hundred....	.20	.25	.30	.20	.25	.25	.25
Five Hundred impressions	1.25	2.00	2.70	1.50	2.50	2.25	1.75
One Thousand impressions	2.00	3.00	4.00	2.50	3.50	3.25	3.00
Every added Thousand...	2.00	2.50	3.00	2.00	2.50	2.75	2.50
Five Quires of Dbl. Cap, 12 to sheet, full size....	1.90	2.75	3.40	1.50	2.50	2.25	1.25
Ten Quires of Double Cap	3.00	4.25	5.25	2.50	3.50	3.25	2.00
One Ream of Double Cap.	5.75	..	8.64	4.50	5.50	5.50	4.00
Every added Ream.....	..	..	7.50	..	..	..	3.00

For Red, Blue, Green, or Brown Ink, add one-third to these prices.

For Carmine or Purple Ink, of best quality, on forms of two or four Cheeks, add one-half to these prices; on forms of five or six Checks, double price of Black.

Cheeks in Two Colors. For an ordinary form, rate the presswork of Red at one-half more than the price of Black, viz: The price of 500 Checks, 3 to page, 1 Check set up, in Black ink, is $2.40; Red ink, one-half more, is $3.60; total, $6.00. If Check is in Red and Blue, rate both colors at the price of Red, $3.60 each, or $7.20. This is for presswork only. For making-up the color-form, the price should vary with the time spent on it. Making-up one or three lines of name of bank only, would be fairly paid at 50 cents for the full form; but if the color-form includes border-rules or name in end-piece, the charge for making-up should be not less than 75 cents for each Check. If exact register is needed, $1 25 each, or more.

Checks with Tinted Ground-work. The special engraving of a **Plain Flat Cheek-tint,** on boxwood or type-metal, with ornamental marginal line only, may be rated at $3.00. **A Ruled Tint-block,** of any pattern, is worth $6.00 @ $7.00. The **Cutting-in of Name,** Initials, Monogram, or Lights to a Vignette, will be an

The prices of this page are for Presswork only.

9½ × 12 inches, Quarter Medium....One-eighth of 24 × 38.

Same prices may be used for size 10 × 14, and all smaller sizes.

Color of Ink.	100.	Every added 100.	250.	500.	1000.	3000. per 1000.	5000. per 1000.	10 M. per 1000.
Black	$ .50	$ .20	$ .80	$1.25	$2.00	$1.75	$1.60	$1.50
Blue	1.00	.25	1.40	2.00	3.00	2.75	2.50	2.50
Red	1.00	.33	1.50	2.35	4.00	3.50	3.00	3.00
Red and Black	1.50	.40	2.10	3.10	5.00	4.50	4.00	4.00

11½ × 16 inches, Quarter Imperial....One-eighth of 32 × 46.

Same prices may be used for size 12 × 12 inches.

Color of Ink.	100.	Every added 100.	250.	500.	1000.	3000. per 1000.	5000. per 1000.	10 M. per 1000.
Black	$ .50	$ .25	$ .90	$1.50	$2.50	$2.00	$1.75	$1.50
Blue	1.00	.30	1.50	2.25	3.50	3.00	2.75	2.75
Red	1.00	.40	1.60	2.75	4.50	4.00	3.50	3.25
Red and Black	1.50	.50	2.25	3.50	6.00	5.50	5.00	4.50

12 × 19 inches, Half Medium....One-fourth of 24 × 38.

Same prices may be used for size 14 × 14 inches.

Color of Ink.	100.	Every added 100.	250.	500.	1000.	3000. per 1000.	5000. per 1000.	10 M. per 1000.
Black	$ .60	$ .30	$1.00	$1.75	$3.00	$2.50	$2.25	$2.00
Blue	1.00	.40	1.60	2.50	4.00	3.75	3.50	3.00
Red	1.00	.50	1.75	3.00	5.00	4.50	4.25	4.00
Red and Black	1.50	.60	2.40	4.00	7.00	6.50	6.00	6.00

14 × 21 inches, Half Royal....One-fourth of 28 × 42.

Same prices may be used for size 15 × 16 inches.

Color of Ink.	100.	Every added 100.	250.	500.	750.	1000.	2000. per 1000.	5000. per 1000.
Black	$ .75	$ .30	$1.20	$2.00	$2.75	$3.50	$3.00	$2.50
Blue	1.00	.50	1.75	3.00	4.00	5.00	4.50	4.00
Red	1.25	.60	2.15	3.65	5.75	6.50	5.50	5.00
Red and Black	2.00	.90	3.35	5.60	8.75	10.00	9.00	8.00

When very little color is used, as will be the case in a very light and open Poster set in Roman or Old Style, the price may be abated nearly to that of Handbills in sheets, as given on page 217. For a very bold-faced Poster compactly set in Antique, with much large type, more color will be used and a higher price may be needed.

Office of Franklin Type Foundry,

Cincinnati, Oct. 1, 1870.

Dear Sir,—

We take pleasure in informing you, that on and after this date, we reduce the price of Leads and Brass Rule in strips, to the following rates:

Leads.

	OLD PRICE.	NEW PRICE.
6 to Pica and thicker, per lb.	.40	.30
7 " " "	.45	.35
8 " " "	.54	.40
9 " " "	.68	.60
10 " " "	.90	.80
12 " " "	1.44	1.25

Brass Rule, *in strips.*

OLD PRICE,	NEW PRICE.
12 cents per foot.	10 cents per foot.
15 " "	12 " "
18 " "	15 " "
24 " "	20 " "
30 " "	24 " "
36 " "	28 " "
42 " "	34 " "
48 " "	38 " "
54 " "	44 " "
60 " "	48 " "
66 " "	52 " "
72 " "	58 " "
90 " "	72 " "

COLORED AND JOB INKS WILL BE SOLD AT LABEL PRICE.

Hoping to receive your orders, we remain,
Yours, truly,

ALLISON, SMITH & JOHNSON.



No. 11.)

FAMILY SCENE IN POMPEII.

By permission—from the "Illustrated Union Hand-Book for 1871," published by C. W. Starbuck & Co. of the Cincinnati Times.

(CONTINUED FROM PAGE 48.)

When fine red inks or inks containing much red are to be used on electrotype or copper-plates, the latter should be silver-plated or well-washed two or three times with liquid silvering solution, which must be allowed to "set" before being used; otherwise the chemical properties of the copper will produce a disagreeable change of the color. We give a recipe for making an excellent

Silvering Solution for Electrotype Plates.

Nitrate of Silver 2 drachms; Distilled Water 37 drachms. Dissolve, and add Sal Ammoniac 1 drachm; Hydrophosphite of Soda 4 drachms; Precipitated Chalk 4 drachms.

Agitate the preparation occasionally for twelve hours, when it will be ready for use. Apply with a piece of fine sponge.

When colored inks are dull, tough, dry, or work badly, they may be softened, improved, and brightened by using different articles. Here are recipes for making some of the best:

A Liquid for Brightening Common Qualities of Black or Colored Inks.

Demar Varnish 1 ounce; Balsam Fir ½ ounce; Oil Bergamot 25 drops; Balsam Copaiba 35 drops; Kreosote 10 drops; Copal Varnish 50 drops. Use in small quantities.

This has been sold for some time under a variety of names, such as "Indispensable," "Pre-requisite," etc.

The whites of fresh eggs are also brighteners of colored inks; but they must be applied a little at a time, as they dry very hard, and are apt to take away the suction of rollers if used for any extended period.

A Good Reducing Dryer.

Brown's (genuine) Japan. Use in small quantities.

Hardening Gloss for Inks.

Gum Arabic dissolved in Alcohol or a weak dilution of Oxalic Acid. Use in small quantities, and mix with the ink as the latter is consumed.

To give Dark Inks a Bronze or Changeable Hue.

Take 1½ lbs. Gum Shellac and dissolve it in 1 gallon 95 per cent. Alcohol or Cologne Spirits for 24 hours. Then add 14 ounces Analine Red. Let it stand a few hours longer, when it will be ready for use. Add this to good blue, black, or other dark inks as needed, in quantities to suit, when, if carefully done, they will be found to have a rich bronze or changeable hue.

Quick Drying Preparation for Inks to be used on Bookbinders' Cases.

1 ounce Bees Wax; ¼ ounce Gum Arabic dissolved in Acetic Acid sufficient to make a thin mucilage; ¼ ounce Brown's Japan. Incorporate with one pound of good Cut Ink.

We also subjoin the following recipes, which may be of service to some of our subscribers:

To make Lithographic Transfer Writing Ink.

Shellac 1½ ounces; Good Soap 2 ounces; White Wax 1 ounce; Tallow 1 ounce. Add three tablespoonsful of strong solution of Gum Sardarac; and when the whole is prepared, color with Ivory Black or the best Lampblack.

To make a Strong and Durable Paste.

One full quart of good Wheat Flour; two gallons Cold Water. Mix, and rub out with the hands all lumps that are formed by the flour. Then add about one-quarter of a pound of pulverized alum, and boil the whole together eight or ten minutes, or until the mass thickens, stirring it well all the time. Now add a quart of hot water, and boil until the paste becomes thick again and of a pale brownish tint. When well made, it will be perfectly clear and free of lumps, and keep from ten to fifteen days.

Gum for Backing Labels.

Take any quantity of clear, pure Dextrine and mix it with boiling water until it assumes the consistency of ordinary mucilage. Apply thinly with a full-bodied, evenly-made, and wide camel's hair brush. The paper should not be too thin or unsized. This preparation will dry quickly, and adhere when slightly wet.

Offsetting, or having the back of a sheet marked by the printing on the one placed under it, may be obviated by piling sheets irregularly, and not permitting them to accumulate until they become weighty. Printing done on dry, highly polished, and hard paper, should be laid out thinly upon a drying rack. Where great liability to offset exists, it is best to place slip-sheets of thin, cheap paper between the printed sheets.

Rice paper, or good rag news, makes excellent slip-sheets to prevent offsetting on sheets that must be turned and printed before the first side is dry, especially in wood-cut presswork.

When tympans become marked from sheets that are printed on both sides, they may be quickly cleaned by rubbing a piece of raw cotton charged with benzine over them. This dries at once, and does not soil like oil, which is sometimes used.

Printing on parchment is sometimes troublesome because of the animal fat that remains in the parchment. By rubbing the sheet over with a clean piece of cotton, dampened with purified benzine, previous to printing, a good impression can be had. But generally, if high grade ink is used, with little or no reduction by varnish, it will print parchment well.

When bronze, smalts, flock, or dry colors are to be used in printing, the size should be of the best possible quality, and tenacious in its hold upon the paper, as well as upon the article to be employed. White size tinted to suit the bronze, smalts, etc., should be used for fine work.

Bronze should be applied with the finest cotton wool, or a piece of the best otter pelt, and wiped off and polished with *clean* cotton or fur before the sizing becomes too hard, being cautious that no scratches are made by the finger nails or from sand in the cotton.

Smalts are generally sifted through a fine sieve upon the printed sheet until it is covered with a sufficient quantity to give it a coating, and the surplus material shaken off when the size is dry.

Flock requires a very strong size to hold it on the paper firmly, and it should be laid on smoothly and evenly. It may be rubbed through a sieve also, and pressed on with a fine buckskin pad. Passing sheets or cards printed with bronze or flock between polished iron cylinders improves the appearance of the work very much.

Dry colors are applied the same as bronze.

The maintenance of a uniform and full color, yet without having more ink at one time upon the rollers or form than is required to do this, is always essential to produce neat presswork. If sheets are allowed to be printed in all the various shades of an ink,—from its intensest depth to its greyer tints,—they will appear badly when placed side by side, especially in book work. The supply of ink should therefore be regulated exactly according to the consumption.

PRINTING WITH COLORED INKS, ETC.

The employment of colored and tinted inks, either singly or in harmonious combinations, is now so generally expected from job printers, that some reliable notes for the guidance of those not yet familiar with the management of colors in printing cannot but be acceptable.

We have gathered from M. CHEVREUL'S able and complete treatise on "*The Principles of the Harmony of Contrast of Colors*," corroborated by other writers on the subject and our own experience and experiments, the following facts, which will be found to embrace most of the rules necessary to be observed in mixing and arranging colors used for printing. But it must not be assumed that the mere dictations of fancy will insure effective combinations of colors. Certain unchangeable laws of natural harmony that govern all colors have so arranged themselves as to be always arbitrary. The proper appreciation of these laws will always result in producing pleasing effects in great variety; while an indifference to, or ignorance of, them will fail to accomplish anything desirable.

In the first place, White Light is held to be composed of *three primary colors*—YELLOW, RED, and BLUE, properly blended. From these three primaries, which may be proportioned and mingled almost infinitely, are produced all the hues that are known.

If two of the *primary* colors are mixed, they produce a *secondary* color. Thus, yellow and red make *orange;* red and blue combined form *violet;* blue and yellow give *green*. Each of these secondary colors harmonize perfectly with the primary that does not enter into its composition. So, for example, orange, made from yellow and red, contrasts perfectly with blue; green, a mixture of blue and yellow, harmonizes with red; and violet, formed by combining red and blue, agrees with yellow. Each of these contrasting colors brightens the other: a violet and a yellow, for instance, being much brighter when placed side by side than when seen separately. These results are what is termed the *Harmony of Contrast of Colors.* Nature furnishes numberless specimens of this harmony of contrast.

The best contrasts are those that are formed from the primary colors; and the three primaries also form a good harmony when placed together. Colors that do not contrast diminish the brightness of each other when placed together. Red, which becomes more brilliant beside green, is weakened by being placed against orange. But neither red nor blue contrasts well with violet, because the latter has each of them in its composition. In cases where their coming together cannot be avoided, the dulness produced may be partially overcome by adding a little of the opposite color. For example, if a violet has to contrast with red, add a shade or two of blue to the violet, rendering it purple. If, however, the violet has to harmonize with blue or green, add more red to it.

The TONES of a color consist of the series of gradations that may be made with it by weakening its greatest point of intensity with white, or deepening it with black.

TINTS are the tones of a color produced by the addition of white added to the normal color.

A HUE is the change produced in a color by adding to it another color. The original color must always be in the ascendant, or it becomes a hue of the color added to it.

SHADES are the tones of a color produced by the mixing of black with the normal color.

TERTIARY COLORS are formed by a mixture of two secondary colors. Thus, orange and green make what is called *citrine*—a pleasant hue wherein yellow predominates, because it occurs in each of the secondaries from which it is made. Purple or deep violet and orange make *russet*, wherein red is the strongest hue for the same reason that yellow is in citrine. *Olive*, formed from deep violet and green, is the third and last tertiary color, and has blue for its predominating hue. Tertiary colors are also termed colored greys. Thus, citrine is *yellow-grey;* russet is *red-grey;* olive is *blue-grey.*

NORMAL-GREY is merely a mixture of pure black and white, mixed in various proportions, producing a variety of tones from white to black. When a primary or secondary color is added to a normal-grey, it becomes a colored-grey.

The Luminous or Warm Colors are Yellow, Orange, Red, Light Green, and the light tones of sombre colors.

The Sombre or Cold Colors are Blue, Violet or Purple, and the broken tones of the luminous colors.

Colors with Black.—In all contrasts, the depth of the color is an important element, but especially so in such as are to be affected by the presence of black. In but few instances will the latter bear the neighborhood of a very deep color to advantage, while it harmonizes with the lighter ones by contrast of tone. Yellow, from its near approach to white, should always be worked "full;" orange and green should also be full, and moderately deep in tone, to contrast with black. If a blue is employed, it should be light, or it will impoverish the black and be weakened itself. A very light blue border, with a broad margin of white between it and the body of matter enclosed, will give a clean, bright look to black ink, and whiteness to the paper. A light pink (such as carmine reduced with flake white or with clear varnish) is also good; yet perhaps the preceding is preferable. Dark and heavy borders are frequently a positive injury to printing, where the working in a light shade would have secured a good effect; for the border should always be so far secondary to the matter enclosed as not to draw off the attention too much to itself.

Colors on Tinted Papers and Tinted Grounds.—Besides the kind of harmony already mentioned, there is another, which is produced by the contrast of light and dark shades of the *same* color. This might be employed in printing more frequently than it is at present with some advantage, as the effects it is capable of yielding are very chaste and pleasing. In a photograph or an engraving, all the effect is dependent on difference of tones of one color; and the beauty of a wood in summer consists chiefly in the contrast displayed by a variety of shades of green only. A deep green ink on a paper of a light tone of the same color is especially good if a heavy letter is used; and, indeed, in most printing in colors, full, solid-faced letters should be preferred to outlines or shaded ones, which are difficult to work, and have at best but an inferior appearance, unless the darkest tones are employed. A deep blue on a light blue ground, or against a light blue border, is also good; and, without the latter accompaniment, it is not unpleasant on a blue wove writing-paper. To secure the proper effect, however, the tints should be of the same hue—that is, if the groundwork is of a bluish green, the color that is to be worked upon it should also be a green, inclining to blue; if, on the other hand, the ground is of a yellower green, the body of ink should also be yellower; and so on. This may easily be managed by adding a small portion of ink of the color required, until the hue is matched.

Neutral Tints.—In selecting borders for the more chaste description of printing, it is a pretty safe rule to avoid such as cover much surface, if they are to be worked in any strong color or in black. When lighter tints are used, they will bear extension over a larger surface; and in this case, a pale grey or neutral border will have a beneficial effect on any body with which it is contrasted, as well as on black itself, which is purified by its proximity. If the central printing is in black only, or in black and yellow, a lavender grey may be substituted for the border. And in any case in which the central matter is all in one color, it will improve it to have a border of grey that is *slightly tinged with the complementary of such color*. Thus, if the body be red, a very small portion of green may be added to the grey; and so forth.

Broken Colors are those in which all three of the primaries exist.

Complementary Colors.—The primary or the secondary colors requisite to make up the complement of colored rays that constitute white light. The complementary of a primary, as red, is the secondary of the other two primaries (green), and *vice versa*.

Mixtures, etc., that produce Tones, Hues, Tints, and Shades of Color.

Yellow and Carmine or Deep Red produce Scarlet or Vermillion.
Carmine and Blue produce Deep Lilac, Violet, and Purple.
Blue and Black produce Deep Blue or Blue-Black.
Carmine, Yellow, and Black produce rich Brown.
Yellow and Black make Bronze Green.
Yellow, Blue, and Black make Deep Green.
Yellow and Blue produce Bright or Light Green.
Carmine and White make Pinks of any depth.
Ultramarine, White, and Carmine form the deeper tones of Lilac, etc.

Violet and White produce Pale Lilac or Lavender.

Cobalt alone or with White is a lively Pale Blue.

Chinese Blue makes a deep Bronze Blue Ink.

Emerald Chrome, Pale Lemon Chrome, and Chinese Blue make any tone of Emerald Green Ink required.

Amber is made from Pale Yellow Chrome and Carmine.

Red Brown may be made with Burnt Umber and a little Scarlet Lake.

Light Brown is made from Burnt Sienna, shading with Lake.

Salmon may be made by a combination of White, Burnt Sienna, and a little Orange Chrome to suit the fancy.

Combinations of Inks that Harmonize Well.

Two Colors.—Scarlet Red and Deep Green; Orange and Violet; Light Blue and Deep Red; Yellow and Blue; Black and Salmon; Black and Light Green; Dark and Light Blue; Carmine and Emerald.

Three Colors.—Red, Yellow, and Blue; Orange, Black, and Light Blue; Light Salmon, Dark Green, and Scarlet; Brown, Light Orange, and Purple; Dark Brown, Orange Yellow, and Blue; Crimson Lake, Greenish-Yellow, and Black.

Four Colors.—Black, Green, Dark Red, and Sienna; Scarlet, Dark Green, Lavender, and Black; Ultramarine or Cobalt Blue, Vermillion, Bronze Green, and Lilac; Sienna, Blue, Red, and Black.

Tints of any desired depth may be made by putting down a finely ground white ink as a basis, and toning it with the color desired—whether a primary, secondary, or tertiary.

Varnish tints are made by adding color to full-bodied, well-boiled printers' varnish, using a little soap and drying preparation to make them work smoothly and dry quickly.

In mixing tints to print with, the muller should be used to rub in the color thoroughly; otherwise the work is liable to be streaky.

It is advisable to mix no more of a tint than is needed for the work in hand.

Most colored printing inks work best if applied to the rollers a little at a time until the depth of color desired is reached, as it distributes slower than black, and is more liable to thicken upon and clog the type when too great a quantity is used at once.

In order to do fine printing with colored inks, it is of great importance that everything connected with the work be *perfectly* clean—form, stone, press, and rollers. The quality and finish of the paper, etc., and size of type to be printed thereon, should also be considered. Soft paper and heavy lines, or coarse cuts, will require the less expensive inks, and such as are soft without much tenacity; while highly polished, hard surfaces,—as on enamelled cards, etc.—call for the finer grades. All good colored inks should work free, and without gumminess or toughness, no matter what the price of them may be.

When the weather is cold or variable, it is often necessary to temper colored inks more or less. But this should be done with great caution and in small quantities by the inexperienced. The best reducing preparations added to the ink in very small quantities, but sufficient to produce the desired result, are generally sufficient. Oils or varnishes used in improper quantities impair the brightness of a color, and produce a greasiness or "curdle" that prevents them from distributing evenly and solidly.

A heavier impression and dwell than usual upon surfaces printed with colors is generally necessary, as such inks have peculiar bodies, and do not take hold of paper so easily as black. For very fine color work, a press that has a trip or contrivance to throw off and on the impression, to admit of repeated rolling, is best.

OVERLAYING CUTS.

The popular opinion of a wood engraving, or its copper or type-metal representative, is inseparable from its treatment by the pressman. If the cut is badly printed, the verdict is—"It is a poor cut;" while a carefully overlaid and well-printed cut is termed "A good piece of engraving." But the criticism may be totally incorrect in either case; for that which is condemned may be intrinsically a beautiful and meritorious work of art, while that which is praised may be nothing of the kind beyond what the printer has wrought for it.

As far as practicable, the printer's and engraver's arts should be accommodated to each other, and we are glad to observe that a disposition to do this is becoming more common than formerly.

The *engraver's proof* is generally considered to exhibit the standard of effect the engraving is capable of producing. Using the best of ink carefully laid on the block, and paper manufactured expressly for the purpose of proving his work, the engraver skilfully "brings out," by means of his smooth ivory burnisher, the strongest effects, treating more gently the middle tones, giving a proper degree of finish and delicacy to the fading tints, and treating the lights and mere tracery that expresses distance, etc., with a view to preserve that harmonious yet natural effect so pleasing to the critical eye, and, at the same time, making visible the thought or thing to be expressed definitely and according to the artist's intention.

In first-class printing from wood-cuts, the engraver's proof may be quite equalled, and sometimes surpassed, in many features. Examples of this fact may be found in MITCHELL'S work on "*The Birds*," and in numerous other of our finest holiday books.

Aside from the quality of the paper or ink, one of the chief processes by which effect from cuts is reached, is by what is termed "overlaying;" and to do this well is not the least accomplishment of the thorough pressman.

The first step toward overlaying is to take a clean and well-defined impression of the engraving upon a sheet of paper that is moderately sized and calendered, but not too hard. Upon this impression he builds or pastes "*overlays*" of exact cuttings—made from other impressions on other papers of various thicknesses—of the dark parts, the middle tones, tints, and whatever requires stronger relief than the ordinary flat impression would produce. The precise lines of the object to be overlaid must be carefully followed in making these cuttings, and a small, keen-bladed knife alone should be used. Delicate outlines requiring but little impression, when they appear too strong, are to be cut out or "reduced" one, two, or more thicknesses of the tympaning.

After the various important parts of a cut are overlaid according to the relative degrees of strength and blending desired, it sometimes becomes necessary to scrape or rub down the edges of overlays, so as to prevent the marks that might otherwise be made from the edges being too abrupt.

When the overlaying, reducing, and scraping processes are completed on the detached sheet, it must be fixed with great precision over another impression of the cut taken upon one of the under tympan-sheets of the press. After careful examination to see that no overlays have been doubled over or displaced, have two or more outer tympan-sheets over all, and get an impression to ascertain if the proper effect is produced; and, if not, add to or reduce the overlaying until it is correct. This will require good judgment, and some idea of the proper amount of light and shade due to the subject. Sometimes a cutting of fine tissue paper will be sufficient to produce a clear, smooth effect where it is lacking; and in portions where the subject appears too heavy or harsh, the removal of a very little overlaying will often make it right.

The minor parts of an engraving, if they be well cut, require but little attention after the main features are thoroughly attended to.

While we would advocate complete overlaying in every case of any importance, we cannot gainsay the fact that even partial overlaying—say that of the dark effects of a picture—is better than none at all; and almost every cut that is sent to press can be improved by even a little attention to this particular.

Another method of preparation to print cuts is to use three-, four-, and even five-ply photograph-mount card-board, and to cut away the lights and fainter tints of a picture, allowing the stronger portion of it to stand, or, in other words, reversing the operation of overlaying or building up. This is principally employed for newspaper illustrations and large cuts, upon which long runs of presswork are to be made. The photograph-card will last longer than paper overlaying, but we do not think it produces so delicate an effect.

Overlays require more or less attention during the printing of a form of cuts, and sometimes need to be repaired or renewed.

We illustrate the difference between overlaying and *not* overlaying in the two cuts on the next page, which are otherwise precisely alike.

There will also be found in various parts of this volume several leaves containing specimens of overlaid cuts, which have been numbered from 1 to 11, and exhibit different styles of treatment. These cuts were not made expressly for this purpose, but were selected from ordinary stocks. Most of them have been previously used for other purposes, and are good examples of such as may be ordinarily met with in illustrated books.

Wood-cuts must never be washed with lye. Benzine or camphene only should be used.

TO MAKE PASTE-POINTS.

Neat and useful *paste-points* for small jobs may be made by taking a piece of No. 1 brass rule, and, after cutting it in the shape of a triangle of any convenient size, filing a neat point at one of the angles about a quarter of an inch long, and bending it at a right angle with the broad part. Paste tough manilla paper around and on both sides of the flat part or plate, and trim. When dry, paste on the tympan as required.

TREATMENT OF NEW WOOD TYPE.

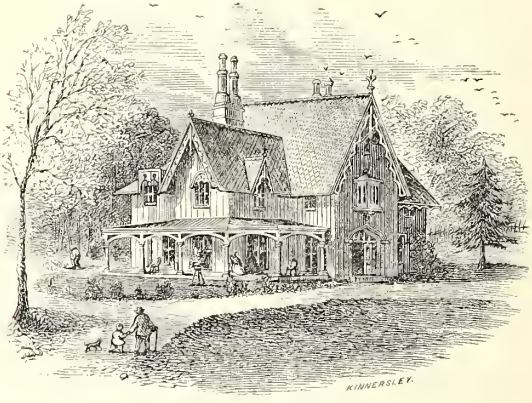
Large wood-letters when quite new should be soaked in a mixture of turpentine and thin boiled linseed oil over night, and taken out of the bath in the morning and wiped clean. Let them stand awhile to absorb what oil, etc. may not have been removed by wiping, then ink them well. After they stand a few hours, wash them with benzine. This will also apply to wood tint-blocks, or any other large wood surface to be printed from.

HOW TO DOCTOR A ROLLER.

The following method of recuperating a hard and unworkable roller has been found to answer admirably:—After washing the roller carefully with lye, cover the surface with a thin layer of molasses, and lay it aside till the next morning. Then wash it with water, and let it hang till dry enough for using.



OVERLAID.



NOT OVERLAID.

General Business Management.

Scarcely any other branch of skilled industry, involving as much capital and intelligence for its proper prosecution as the general printing business, has such contradictory and widely varying charges for its products. Proprietors of offices and those who have them in charge, having, in a majority of cases, adopted no standard whereby to estimate labor, consumption of material, wear, waste, and other necessary expenses, seem to transact their affairs in this particular by a system of guesswork, or some other hap-hazard principle, which has caused the idea to exist in the minds of many persons who employ printers frequently, that the profits of the craft are so exorbitant that the smallest sum a piece of work can be had for, (often without regard to quality it is true), is ample remuneration for the amount of work done.

The foolish, not to say reckless, greed of incompetent parties, who will have business at any price or risk, is mainly accountable for the inadequate prices that rule for many kinds of printing; while those who can do better things, but have placed themselves in competition with the suicidal disposition to underbid,—so rife among certain wretched printers,—have the satisfaction, if such it is, of knowing they will be the real sufferers, *ad finem*.

That many persons engaged in printing are fairly intentioned, but culpably ignorant concerning the true value of their own work,—laboring on industriously for years with little or no advance in their worldly circumstances,—is literally true. Undecisive of character, although possibly capable as workmen, they underrate themselves, and constantly yield to the representations of interested parties, who make it their business to get the most labor for the least money, and who have, by a practice of "getting bids," made printing almost a beggarly vocation in many quarters; besides which, the too ready disposition to reduce the prices of work, etc. below, rather than increase them up to, a fair valuation, seems to become, as time progresses, more and more the rule among printers themselves.

In this connection we deem that we are doing a real service to our fellow-craftsmen in pointing out a work that will serve them as a valuable and practical guide in making estimates and obtaining a full understanding of many items that every manager and clerk should be familiar with. We allude to Mr. Theo. L. De Vinne's new edition of "*The Printers' Price List; a Manual for Clerks and Book-keepers in Job Printing Offices.*" It is a work of much research and labor, and is published by Francis Hart & Co., General Printers, No. 63 Cortlandt Street, New York.

Many of the evils that attend the prosecution of type- and press-work arise from the want of a good system of apprenticeship, now almost totally ignored throughout our country. A lad or young man of any age is permitted to enter an office in some capacity, uncontrolled by any *legal*

regulation bearing upon the generally verbal agreement made between the parties. After serving what he deems a sufficient time in his case, or until he feels disposed to quit, whether capable as a workman or not, the youth starts forth, joins a "*Union*," and, presto! he must rank, so far as wages are concerned at least, with the really good workman who has served a full and faithful term of *indentured* apprenticeship, during which he has become excellent and expert in his calling.

Again: chance or opportunity may place the inferior printer in charge or possession of an office of greater or lesser resources, where, knowing his incapacity to compete squarely with his betters, his resource is to compel patronage by doing miserable work for undiscriminating customers at the poorest prices, and thereby often causing his abler competitor to take less than what he knows is just compensation for his work, or leave his facilities unemployed.

The following rules for business management have been found correct, both from observation and practice, and we cannot urge them too strongly upon the attention of every one who conducts a printing concern with something more than a mere pittance in view:

Do not go beyond your capital in purchasing material, and never purchase what is not likely to be of immediate use, no matter how cheap it is.

Avoid buying odds and ends of second-hand printing material about which you know little or nothing.

Insist upon order, and the careful usage of the implements, etc., whether the office is your own or otherwise.

Have regular hours for opening and closing business, and require all your workmen to observe them.

Preserve a carefully considered, just, and fixed system for estimating work according to its quality, keeping in view the probable consumption and waste of all material, wear and tear of implements, superintendence, and other expenses, no matter how trivial they may seem; for the least cost can be computed by an average per centage.

Having determined what amount of money a piece of work is really worth, including a positive and not suppositious profit, make that the price, and do not deviate from it.

Be courteous and willing to accommodate all reasonable demands, but be decisive in your transactions. A host of errors results from a vascillating disposition.

Be prompt, making no promises that you may not reasonably expect to fulfil; and fill your orders according to your promises. In hurried times do not put aside one customer because a later one is urgent, unless the first one has allowed ample time wherein you may accommodate the last one also; for, though you may have gained a new patron by the measure, you will be apt to lose the former one if he be disappointed by not getting his work when promised.

When customers want good work done at less than it is fairly worth, reason with them calmly; and, if they will not be convinced, but make

assertions in regard to the prices charged by others that seem unreasonable, or seem disposed to go elsewhere, do not go into a tirade against your competitors. Neither would we have you yield, knowing you are adopting a wrong; but simply declare you cannot do business at such rates and realize a fair profit.

Have a clear understanding with a patron before what he desires is done, what the price for it will be,—approximately, but large enough, if it cannot be determined at once,—so that there will be no disagreeable compromise to make after the work is rendered and to be settled for.

Lost valuable time occasioned by the customer, such as extra work, alterations, etc., should be charged. Too little regard for these items causes sad leaks in the profits of an office. A price is given, based upon the ordinary contingencies of a piece of work; but the party for whom it is to be done proves capricious, and demands frequent changes, proofs, etc., although the first piece of work may be performed neatly and well. It is but just, then, that he should pay for it. Where no guide is given or any style indicated, or where there has been no previous understanding concerning such waste of time, its cost should be stated immediately before it is made, so as to make it optional with the patron to have it done or not.

Careful estimates, cast-ups, and the like, requiring time and experience to make, should be charged for, unless the work is guaranteed to the office, in which case it should go with the estimate for general superintendence.

The *cash system* should be closely adhered to, and strangers, without any exception, on account of appearance or address, required to pay in advance, or to leave a sufficient deposit to prevent absolute loss.

Workpeople should be paid *in full* every pay-day; but it would be well to have an understanding with them concerning the time they are to give an employer, and the employer them, notice of separation for any cause. As an earnest, on the part of the accepted workman, it should be made a part of the business contract that he leave in his employer's hands a certain sum weekly to be forfeited in case of his non-compliance with the agreement. An equivalent, whereby to bind the employer, might also be made by a written agreement or stipulation properly witnessed. This would prevent the sudden departures and discharges that usually occur in the most improper seasons.

While it is always right to be amiable and pleasant with those who patronize an establishment, their familiarity with workmen during working hours should not be permitted; and informing them of matters in hand not necessary for them to know, had better be left unsaid. Loungers should be repelled by the simple information, politely but pointedly told, that your affairs require your personal attention, and that it retards the workmen to converse with them. This will generally suffice without giving offence.

Do not suppose, if orders are plenty and customers easily managed during busy seasons, that dull times will not come and patrons be exacting or hard to please. It is during business lulls that many are tempted to work below what they can afford to do, and to yield advantages that are pretty sure to remain advantages *to the customer* in future transactions.

Never retain an unprofitable workman unless you can afford the expense, or it is done out of charity. One who receives more than he yields becomes a burden, and should not be needlessly encouraged.

Have no more workmen than your materials and implements will keep comfortably employed without waste of time. It is often a false idea that the more people there are about a concern, the more business is being done.

In the type department, it should be the rule to distribute forms as fast as they are released from the press, unless there is a prospect of their being used again within a reasonable length of time. But, unless there is an arrangement made with a customer to keep type standing for him, its being kept in form should be solely for the benefit of the office.

Make it incumbent upon compositors to send forms to press thoroughly justified, revised, and leveled, leaving nothing for the pressman to do but make it ready on the press and print it. Also insist upon the forms being returned from the pressroom as soon as they are off, thoroughly washed and free from attachments that are no longer useful, such as underlays, etc.

Do not be lured into purchasing everything new that emanates from the foundries. Obtain what you really need *when* you need it, and then select what you deem the most appropriate and best for your purpose. Much of the embarrassment that occurs among employing printers comes from the disposition to increase their stock of types, etc. with the latest productions, whether their incomes warrant it or not. It will require a pretty considerable business and large profits to permit the purchase of the temptations that our friends the type-founders spread before our eyes so constantly. But, we repeat, beware of indulging in novelties too often.

If your business is good, do not be niggardly with such supplies as hasten forward your transactions. Let there be enough sticks, chases, leads, slugs, metal furniture, small tools, etc., to permit workmen to keep at work and not wait upon each other. But this does not imply that unnecessary quantities should be got merely for transient convenience. As fast as an article of general supply is released, it should be placed in a position for immediate use again, and not have to be searched for when needed.

Avoid practising or encouraging the prevalent disposition among customers to have, and workmen to do, what may be termed *useless composition*—that is, having several justifications of as many styles of letters in one line, when one, or at most two, kinds of letters would look neater and better, and require less expenditure of time and labor. Elaborate border and flourish work, and curving type lines and rules into a bad imitation of engraving, may be ranked with this kind of composition, which, unless it is amply paid for, becomes a nuisance and a positive bar to the profitable prosecution of a job. At the same time we advocate the most elegant and *artistic* effects that can be produced, *if it is paid for*. Otherwise adhere to the rules of "neatness and dispatch," permitting nothing to be done that is not well done; but, at the same time, let it be done without unnecessary waste of time; for in nothing is the fact that "time is money" more pronounced than in the printing business.

Technical Terms used by Printers:

Alley—The space between two stands.

Ascending letters—Letters that extend into the upper shoulder: as h, d, l, etc., and all the capitals.

Author's proof—The clean proof sent to an author after the compositor's errors have been corrected.

Banque—A table about four feet high, to lay sheets on at press.

Bastard title—A short title preceding the general title of a work.

Bastard type—Type with a face larger or smaller than its appropriate body, as Nonpareil on Minion body, or Minion on Nonpareil body.

Batter—Types accidentally injured in a form.

Beard of a letter—The outer angles supporting the face of a type and extending to the shoulder.

Bearer—A strip of reglet to bear off the impression from a blank page. A long piece of furniture, type-high, used in working jobs. A solid-faced type interspersed over the blank parts of a page, in composing for stereotyping, to resist the force of the knife when the plates are shaved.

Bearer-lines—The top line and bottom line in a page prepared for stereotyping.

Bed—The flat part of the press on which the form is laid.

Bevels—Slugs cast nearly type-high, with a bevelled edge, used by stereotypers to form the flange on the side of the plates.

Bite—An irregular white spot on the edge or corner of a printed page, caused by the frisket not being sufficiently cut out.

Blankel—A woolen cloth used in the tympan.

Blank-line—A line of quadrates.

Blocks—The mahogany frames on which stereotype plates are affixed for printing.

Bodkin—A delicate awl-like tool used for correcting errors in type.

Body—The shank of the letter.

Botch—An incompetent workman.

Bottle-arsed—Type wider at the bottom than at the top.

Boxes—The compartments of a case in which the types are placed.

Brayer—A wooden or glass rubber, flat at the bottom, used to bray or spread out ink on the ink-block.

Break-line—A short line.

Broadside—A form of one page, printed on one side of a whole sheet of paper.

Broken matter—Pages of type disrupted and somewhat intermingled.

Bundle—Two reams of paper.

Bur—Rough edge of a type which the founder neglected to take off in dressing.

Caret—A character [∧] used to denote the place where an omission in the proof should be inserted.

Case—The receptacle for type, divided into numerous compartments.

Cassie paper—Formerly, the two outside quires of a ream, consisting of defective sheets.

Casting off—Estimating how many pages a certain quantity of copy will make in type.

Ceriphs—The fine lines and cross-strokes at the end of a letter.

Chapel—A printing-office.

Chase—A rectangular iron frame in which pages of type are imposed.

Clean proof—A proof containing few faults.

Clearing away—Properly disposing of materials after a work has been completed.

Close matter—Solid matter with few break-lines.

Companionship—All the hands on a work.

Composing—Setting type.

Composing-rule—A steel or brass rule, with a beak at one end, used in type-setting.

Composing-stick—An instrument in which types are arranged in words and lines.

Correct—A compositor is said to correct when he amends the faults marked in a proof.

Corrections—The alterations or errors which are marked in a proof.

Cut-in letter—A type of large size adjusted at the beginning of a line at the commencement of chapters.

Cut-in note—A note justified into the side of a page.

Dead horse—Matter charged before it is set.

Dele, [δ]—A proof-reader's mark, signifying to take out.

Devil—The errand-boy of a printing-office.

Dished—A defect in electrotyped plates, the centre of a letter being lower than its edges.

Distributing—Returning type to their various boxes after having been printed from. Spreading ink evenly over the surface of a roller.

Doublet—Among compositors, a repetition of words; among pressmen, a sheet that is twice pulled and mackled.

Dressing a chase or form—Fitting the pages and chase with furniture and quoins.

Drive out—To space widely.

Duck's-bill—A tongue cut in a piece of stout paper and pasted on the tympan at the bottom of the tympan-sheet, to support the paper when laid on the tympan.

Dudoecimo, or 12mo—Twelve pages to a form

Em—The square of the body of a type.

En—Half the dimensions of the preceding.

Even page—The 2d, 4th, 6th, or any even-numbered page of a book.

Fat—Poetry and leaded matter.

Face of a letter or form—The part that is printed from.

Fat face, or *Fat letter*—Broad-stemmed letter.

First form—The form first printed, which generally contains the first page of a sheet.

Fly—The person or apparatus that takes off the sheets from the press.

Folio—Two pages to a form.

Foot-sticks—Sloping pieces of furniture placed at the bottom of pages, between which and the chase the quoins are driven to fasten the pages.

Form—The pages when imposed in a chase.

Foul proof—A proof with many faults marked in it.

Fount—An assortment of type in definite proportions.

Friar—A light patch in a printed sheet, caused by defective rolling.

Frisket—An iron frame fastened by a hinge to the upper part of the tympan, to hold the sheet of paper fast as it goes in and comes from the press.

Fudge—To contrive without proper materials.

Full press—When two men work at the press with hand-rollers.

Furniture—Strips of wood or metal placed around and between pages when imposed.

Galley—A wooden or brass flat oblong tray, with side and head ledges, for holding type when composed.

Galley-slaves—An ancient term of derision applied by pressmen to compositors.

Gauge—A strip of reglet with a notch in it, passed with the make-up, to denote the length of the pages.

Get in—To set close.

Good color—Sheets printed neither too black nor too light.

Guide—A piece of metal frequently used to denote the last line set.

Gutter-sticks—Furniture used in imposition to separate the pages.

Half press—When but one person works at the press.

Half-title—The title of a book inserted in the upper portion of the first page of matter.

Head-stieks—Furniture put at the head of pages in imposition, to make margin.

Hell—The receptacle for broken or battered letters; the old-metal box; the shoe.

High-line—Term applied to a type that ranges above the rest in a line.

High (or low) to paper—Applied to a type cast higher or lower than the rest of the fount.

Horse—The stage on the banque on which pressmen set the heap of paper.

Horsing—Charging for work before it is executed.

Imposing—Arranging and locking up a form of type in a chase.

Imposing-stone—The stone on which compositors impose and correct forms.

Imprint—The name of the printer or of the publisher appended to jobs or title-pages.

Inferior letters—Small letters cast near the bottom of the line.

Inset—Same as offcut.

Jeff—To throw for a choice with quadrates instead of dice.

Justifying—Spacing out lines accurately.

Keep in—To crowd in by thin spacing.

Keep out—To drive out or expand matter by wide spacing.

Kerned letter—Type of which a part of the face hangs over the body.

Laying cases—Filling cases with a fount of new type.

Laying pages—Placing pages on the stone in a proper order for imposition.

Leaders—Dots or hyphens placed at intervals, one, two, or three ems in length, to guide the eye across the line to the folio in tables of contents, etc.

Leads—Thin strips of metal cast of various thicknesses, quadrate-high, to separate lines of type.

Lean—Close and solid matter.

Lean face—Light, thin type.

Letter hangs—When the page is out of square.

Letter-press printing—Printing from types.

Ligatures—Two or more letters cast on the same shank, as ff, fl, fi, ffl, ffi, æ, œ.

Locking up—Tightening up a form by means of quoins.

Logotypes—The same as ligatures.

Long cross—The bar that divides a chase the longest way.

Long pull—When the bar is brought close to the cheek of a press.

Low case—When the compositor has set almost all the letters out of his case.

Lower case—The case containing the small letters of the alphabet, figures, points, etc.

Low line—Applied to a type that ranges lower than the rest in a line.

Mackle—When part of the impression appears double.

Make-up—To arrange the lines of matter into pages.

Making margin—In imposition, arranging the space between the pages of a form so that the margin will be properly proportioned.

Making ready—Preparing a form on the press for printing.

Mallet—A wooden hammer.

Matter—Composed type.

Measure—The width of a page.

Monk—A black spot in a printed sheet, owing to the ink not being properly distributed.

Naked form—A form without furniture.

Nicks—Hollows cast in the front of the lower part of the shank of a type, to show the compositor how to place it in his stick.

Octavo, or 8vo—Eight pages to a form.

Odd page or folio—The 1st, 3d, and all uneven-numbered pages.

Off—Signifies that the pressman has worked off the form.

Offcut—A portion of a sheet that is cut off before folding.

Off its feet—When matter does not stand upright.

Open matter—Matter widely leaded or containing numerous break-lines.

Out—An omission marked in a proof by the reader.

Out of register—When the pages do not back each other.

Overlays—Cuttings of paper pasted on the tympan-sheet to bring up the impression.

Overrunning—Carrying words backward or forward in correcting.

Page-cord—Twine used for tying up pages.

Passing the make-up—Passing to the next hand in order the lines remaining (if any) after a compositor has made up his matter, together with the guage and proper folio.

Peel—A broad, thin board with a long handle.

Perfecting—Printing the second form of a sheet.

Pi—Type promiscuously intermingled.

Pick—A particle of ink or paper imbedded in the hollow of a letter, filling up its face and occasioning a spot.

Pigs—An ancient nickname given in derision by eompositors to pressmen. The press-room was called a pig-sty.

Planer—A smooth block of wood used for levelling the surface of pages of type when imposed.

Planing down—To bring down types evenly on their feet, by laying a planer on the page and striking it firmly with a mallet.

Platen—The part of a printing-press which, under the influence of the lever, gives the impression to a sheet.

Point-holes—Fine holes made by the points to register the second impression by.

Points—Two thin pieces of steel with a point at one end, adjusted to the tympan with screws, to make register.

Quadrate—A low square blank type, used to indent the first line of a paragraph, and to fill up blank spaces.

Quarlers—Octavos and twelves are said to be imposed in quarters, not from their equal divisions, but because they are imposed and locked up in four parts.

Quarto, or 4to—Four pages to a form.

Quire—Twenty-four sheets of paper.

Quoins—Small wedges for locking up a form.

Quotation furniture—Quotations cast of various sizes in length and width, to be used for blanking and as furniture.

Quotations—Large hollow quadrates.

Rack—Receptacle for cases.

Ratting—Working at less than the established prices.

Ream—Twenty quires of paper.

Recto—Right-hand page.

References—Letters or characters serving to direct the reader's attention to notes at the foot of a page.

Register—To cause the pages in a sheet to print precisely back to back.

Register sheet—The sheet used to make register.

Reglet—Thin furniture, of an equal thickness all its length. It is made to the thickness of type.

Reiteration—The form printed on the second side.

Revise—The last proof of a form before working it off.

Riding—One color falling on another. Type at the end of a line catching against a lead.

Rise—A form is said to rise when, in raising it from the correcting-stone, no letters drop out.

Roller—An iron or wooden "core" or cylinder covered with composition, which, set in an iron frame, revolves and is used for inking type.

Rounce—The handle for running in and out the carriage of a hand-press.

Round pick—A dot in a letter in a stereotype plate caused by an air-bubble.

Running title—The title of the book or subject placed at the top of the pages.

Runs on sorts—Requiring an inordinate proportion of particular letters.

Saw-block—A box similar to a carpenter's mitre-block, to guide in cutting furniture, etc.

Schedule—A list passed with the make-up, containing folios on which the compositor marks his name opposite to the pages set by him.

Set off—When sheets that are newly worked off soil those that come in contact with them, they are said to set off.

Shank—The square metal upon which the face of a letter stands.

Sheep's-foot—An iron hammer with a claw-end.

Shooting-stick—A wedge-shaped instrument for locking up a form.

Short cross—The short bar which, crossing the long bar, divides the chase into quarters.

Shoulder—The upper surface of the shank of a type not covered by the letter.

Side-sorts—Types in the side and upper boxes of a case, consisting of letters not frequently used.

Side-sticks—Sloping furniture on the outside of the pages next to the chase, where the quoins are inserted.

Signature—A letter of the alphabet or a figure used at the bottom of the first page of a sheet, as a direction for the binder in placing the sheets in a volume.

Slice galley—A galley with an upper false bottom, called a slice, used for large pages and jobs.

Slug—A thick lead.

Slur—A blurred impression in a printed sheet.

Solid pick—A letter in a stereotype plate filled up with metal, resulting from an imperfect mould.

Sorts—The letters in the several case-boxes are separately called sorts, in printers' and founders' language.

Space-rules—Fine lines, cast type-high, and of even ems in length, for table and algebraical work.

Spaces—Low blank types used to separate words.

Squabble—A page or form is squabbled when the letters are twisted out of a square position.

Stand—The frame on which the cases are placed.

Stem—The straight flat strokes of a straight letter.

Stereotype printing—Printing from plates.

Stet—Written opposite to a word, to signify that the word erroneously struck out in a proof shall remain.

Sub—A compositor occasionally employed on a daily paper, to fill the place of an absentee.

Superior letters—Letters of a small face, cast by the founder near the top of the line.

Table-work—Matter consisting partly of rules and figures.

Take, or Taking—A given portion of copy.

Token—Two hundred and fifty sheets.

Turn for a letter—When a sort runs short, a letter of the same thickness is substituted, placed bottom upward.

Tympan—A frame covered with parchment and attached to the press-bed, to lay the sheet on before printing.

Underlay—A piece of paper or card placed under types or cuts to improve the impression.

Upper case—The case containing capital and small capital letters, fractions, etc.

Verso—Left-hand page.

Way-goose—A term given in England to the annual dinner customary among printers there during the summer months.

White line—A line of quadrates.

White page—A blank page.

White paper—Until the second side of a sheet is printed, pressmen call the heap white paper.

Working in pocket—When the hands share equally their earnings on a work.

CLOSING NOTES.

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Mr. Geo. C. Ripley, Secretary Home Life Insurance Company, New York, for the beautiful cuts on page 240.

The Boston Type Foundry, through its well-known Business Agent, Mr. James A. St. John.

Mr. Wm. Cubery, Printer, (of the firm of Cubery & Co.), San Francisco, Cal.

The black ink used throughout the work is from the manufactories of J. K. Wright & Co.; Gray's Ferry Printing Ink Works; and Charles Eneu Johnson & Co., Philadelphia; and George Mather's Sons, New York. The average price paid for it was about $2.50 per pound.

The presswork, under the superintendence of Mr. David Cohen, was done mainly on the new "Globe" half-medium, although other bed-and-platen treadle-presses were used. 476,000 impressions were required to complete less than three thousand copies of the book.

The excellent electrotyping of the Franklin Type Foundry, under the personal care of Mr. Alexander Campbell, and of Messrs. McKay & Cullin, Cincinnati, has been frequently brought into requisition for various small parts of the work; and we are pleased to say that our city produces this kind of work equal, if not superior, to any done in the country.

Messrs. Smith & Porter, General Printers, Boston, also have our thanks for plates of tessellated borders, worked in colors.

Messrs. Copper & Fry, the well-known Stamp Cutters of Philadelphia, executed the stamp seen on the "Typograph."

It will be noted that we have avoided using in these pages the most expensive colored printing inks, such as exceeding fine carmines, purples, violets, greens, etc. This has been intentional on our part, as we have desired to present work that may be done with the medium grades of colored inks, such as are most generally used, and do not involve extravagant outlay. Neither have we exhibited the extremes that may be reached in typographic display. It may be mentioned incidentally, however, that we had made arrangements with Mons. Charles Derriey, the celebrated engraver, founder, and printer of Paris, France, and several other superior letterpress printers in Europe, to have pages of their workmanship in the "Typograph." The impending war now in progress between France and Prussia has prevented the fulfilment of this understanding, and we have been consequently left to do what we could ourselves, except in a few obvious instances, or delay the work indefinitely.

☞ **Parties desiring electrotyped duplicates of any of the Designs, Borders, or Engravings shown in this volume, will be furnished with them at reasonable prices.**

☞ **Collections of Samples from our current work may be had in lots costing from $1.00 to $5.00.**

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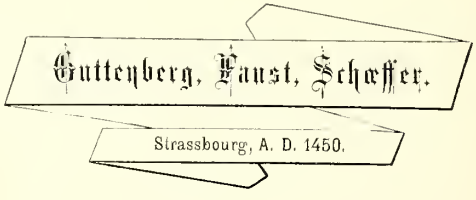
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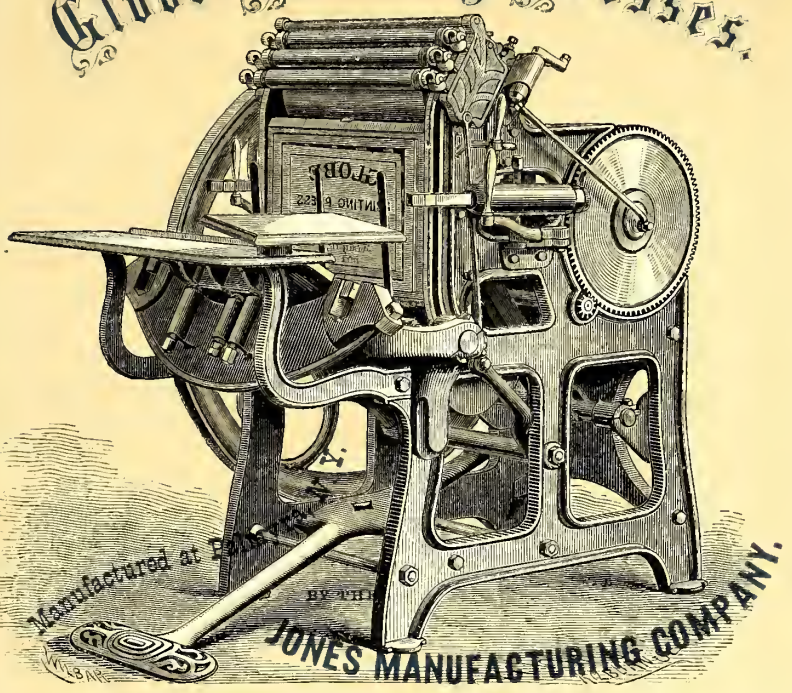
ADVERTISERS' ADDENDA.

CINCINNATI TYPE FOUNDRY COMPANY, Cincinnati.
FRANKLIN TYPE FOUNDRY, Allison, Smith & Johnson, Proprietors, Cincinnati.
GRAY'S FERRY PRINTING INK WORKS, Philadelphia.
HAGAR & CO., Type Founders, New York.
J. K. WRIGHT & CO., Manufacturers of Printing Inks, Philadelphia.
JONES MANUFACTURING COMPANY, Manufacturers of the "Globe" Printing Presses, Palmyra, N. Y.
McKAY & CULLIN, Electrotypers and Stereotypers, Cincinnati.
N. C. HAWKS'S IRON BRACKET COMPOSING STANDS, Milwaukee, Wis.
ROBERT S. MENAMIN, Publisher "Printers' Circular," and Printers' Furnisher, Phila.
THE NOVELTY JOB PRINTING PRESS. Benj. O. Woods, Boston, Mass.
VAN BIBBER & CO., Manufacturers of Rollers and Roller Composition, Cincinnati.
WILLY WALLACH, Importer and Dealer in Fine Cards, Programmes, etc., New York.



Advertisers' Addenda

Globe Printing Presses.



At the Massachusetts Charitable Mechanic Association Exhibition, held in Boston, in September, 1869, the "GLOBE" received a Gold Medal, the highest award ever made for a Job Printing Press.

REPORT OF JUDGES:

"The Committee pronounce the **Globe Job Printing Press** to be the best Job Press yet offered for sale. It has several new principles which other presses of the kind do not have; among which is the '**Throw-Off**,' an advantage which is almost indispensable, and will be readily appreciated by all printers. It possesses a new mode of giving the impression by which a '**Dwell**' is obtained when the form has touched the sheet, thereby securing a more perfect impression than can possibly be obtained by the old method by crank movement. **The Detention of the Rollers on the Cylinder** at the will of the operator, without stopping the machinery, thereby giving extra facilities for distribution of the ink, is a new feature in Job Presses, the want of which has been felt by pressmen for years, but never until now has this great desideratum been accomplished. There are other points, of more or less importance, which render this a most desirable press, and, in the opinion of the Committee, the most perfect yet presented to the notice of printers. We therefore recommend the award of a **Gold Medal**."

N. B. SHURTLEFF, Mayor of Boston,
A. K. P. WELCH, of Welch, Bigelow & Co.
ORRIN F. FRYE, of Rand, Avery & Frye,
CHARLES DEANE
} Judges.

All of these Presses will be thoroughly tested, strongly boxed, and delivered to the order of the purchaser, at our manufactory, Palmyra, N. Y. at the following Net Cash Prices:

HALF MEDIUM,	13 x 19½ inches inside of chase,	$550
QUARTO MEDIUM,	10 x 15 " " "	425
EIGHTH MEDIUM,	8 x 12 " " "	250

Fountain, $25. Steam Fixtures, $15. Boxing, $6 to $10 extra.

1 Roller Mould, 2 sets of Roller Stocks, and 3 Chases, are included with each Press.

This page was worked on a Half Medium Globe Press.

THE

CINCINNATI TYPE FOUNDRY,

No. 201 VINE STREET,

MANUFACTURES TYPE IN GREAT VARIETY,

And its Complete and Extensive

PRINTING MACHINE WORKS,

Also produce all the IRON and WOODEN APPURTENANCES of the business, including

Cylinder, Job, and Hand

PRESSES,

We are also the Agents for the sale of Type and Presses from all other manufacturers in the country, and fill orders promptly from any Specimen Book;

BUT,

NO OTHER House in the Union CAN fit out a complete Office with Types, Presses, Stands, and Cases, entirely with goods of their own production,

CONSEQUENTLY

This is the place to fit out a Printing Office. Send for Specimens and Estimates to

C. WELLS, Treas.

No. 201 Vine Street, Cincinnati, Ohio.

THIS PAGE WAS WORKED ON A HALF MEDIUM NONPAREIL PRESS. BORDER BY B. B. CHAMBERLIN, CINCINNATI.

ESTABLISHED HALF A CENTURY.

Type Foundry and Printers' Emporium

— OF —

HAGAR & CO.

38 GOLD STREET, NEW YORK.

This old-established Foundry, having a Large Stock and Complete Assortment of the most Modern Faces of

JOB

BOOK TYPE NEWS

FANCY

Is prepared to fill Orders with accuracy and despatch.

Printing Material, Power, Hand, and Job Presses,

OF EVERY DESCRIPTION,

Of all the Popular Manufacturers, furnished at Short Notice and at Regular Prices.

AGENCIES:

DETROIT, Mich. { 87 Woodward Avenue.

SAN FRANCISCO, Cal. { 532 Clay Street.

ESTIMATES FURNISHED AND INQUIRIES RELATIVE TO THE BUSINESS, PROMPTLY AND CHEERFULLY MADE.

Printing Inks.

J. K. WRIGHT & CO.

PRINTERS' AND LITHOGRAPHERS'

INKS,

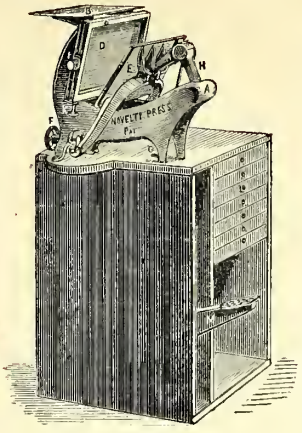
Gold Size, Varnishes, Boiled Oil, etc.

FAIRMOUNT PRINTING INK WORKS,

PHILADELPHIA.

THE reputation of our Inks is now so well established throughout the United States and elsewhere, for their brilliancy, ease of working, cheapness, and general superiority, that an extended notice of them here is not necessary. We deem it sufficient, therefore, to state that no pains will be spared in the future as in the past, to maintain the highest degree of excellence in our products and to give the fullest satisfaction to our many patrons. ☞ **The Ink used on this page is our own make.**

J. K. Wright & Co.



THE

NOVELTY JOB PRINTING PRESS

Is the only Low Priced Press ever invented that will do

GOOD WORK.

It is so simple in its construction, and so admirable in its details, that a novice in the art of printing can readily understand its principles and the manner in which it is worked. The finest printing is done upon it at a speed equaling the highest-cost presses, and it is so durable in construction that it will long outwear them and cost nothing for repairs. It excels all other presses in **Simplicity, Durability, Compactness, Availability, Convenience, Efficiency, Speed,** and **Economy.** The proprietor claims that printing can be done as well and as rapidly on this Press as on the best that printers use; and for printing offices where artificial power is not used, or for business men, apothecaries, grocers, country traders, and others who desire to do their own printing, it is entirely without a rival.

It is most admirably adapted to the use of Sabbath-schools, Colleges, and other institutions for instruction, and for Missionary Work in all parts of the world. Also unsurpassed as a Village Newspaper and Job Press. Three sizes of Presses are furnished as follows:—

Duodecimo, prints	*4*	*by*	*6 inches,*	*price, $15*
Octavo,	"	*6* "	*10* "	" *30*
Quarto,	"	*9* "	*14* "	" *50*

Send for full descriptive illustrated circulars, with testimonials from all parts of the country, and specimens of plain and color printing done on the Press, and specimen sheets of types, borders, cuts, rules, etc. to

BENJAMIN O. WOODS, Manufacturer,

Dealer in every description of Printing Materials, No. 351 Federal Street, Boston, Mass.

Or to the following Agents: **C. C. THURSTON,** No. 16 College Place, N. Y.; **KELLY, HOWELL & LUDWIG,** 917 Market St., Philadelphia, Pa.; **A. C. KELLOGG,** 65 West Van Buren St. Chicago, Ill.

Gray's Ferry Printing Ink Works,

G. E. ROBINSON & BRO.

MANUFACTURERS OF

Black and Colored

Printing and Lithographic Inks,

VARNISHES, Etc.

Quick Drying Printing Inks,

— FOR —

Blank Book Headings, Bill Heads, and Highly Calendered Paper, Cards, etc.

GRAY'S FERRY ROAD AND 33RD STREET, PHILADELPHIA.

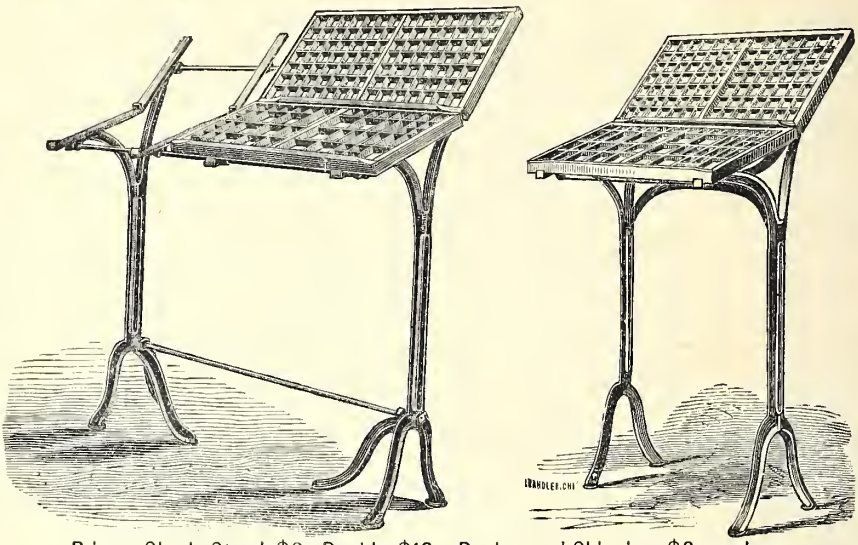


ROWLEY & CHEW, ARTISTIC PRINTERS 14 AND 16 S. SEVENTH ST., PHILA.


OFFICE
168 Vine Street.
FRANKLIN
TYPE FOUNDRY,
Allison, Smith & Johnson,
CINCINNATI.

HAWKS'S

IRON BRACKET COMPOSING STAND.



Prices: Single Stand, $8; Double, $12. Boxing and Shipping, $3 per dozen.

THIS is an **improved form of Printers' Composing Stand**, and is composed **wholly of iron.** It is intended to take the place of the old wooden "rack stand."

The **advantages** of the **Iron Stand** will be easily understood from the cuts. In the first place, there are no slides; the inventor claiming that a stand should be a stand, and not a cabinet. The depositing of cases of type under the compositor's stand was a source of evil, rather than a convenience, from the start. Every printer knows that if a case which is under a stand, is wanted, he must go there and set his line; and if a brother typo is at work at that stand, one or the other is obliged to give way. To the compositor who is using the Roman case it is a great annoyance, and to the employer it is a loss of time. Where the bulk of type is in racks, this occurs frequently. It has been estimated that one man's time out of ten is wholly lost to the employer in this setting of lines from cases among printers' legs.

Those cases are always dusty and dirty, for they catch everything. They are an abomination to a stand, because they are always raking a compositor's shins and knees, or else obliging him to stand in a stooping posture. The cabinet is unquestionably the proper place for italic and job type.

The Bracket form of the Iron Stand will be readily appreciated by all printers, and **cannot fail to call forth their unqualified approval.** It gives opportunity to stand erect, and to use the legs freely; and those who avail themselves of the stool can doubly realize the comforts of it in sitting close up, and when a change is desired the stool can be pushed under the stand out of the way.

Its **beauty as an article of printing office furniture**, would alone recommend it, if it possessed none of the advantages claimed. An office furnished with these stands presents a very clean, light, and airy appearance.

There is no chance to store rubbish under these stands. The office boy can sweep clean, without difficulty, in one-third the time it takes to sweep around the old ones.

Their durability makes them a good investment. There is no article in a printing office but wears out; the Iron Stand will never wear out by any ordinary use.

Some improvements have been made in both single and double stands, being principally to add strength and firmness. They are now thought to be as simple and strong as it is possible to make them.

The manufacturer offers the Iron Bracket Composing Stand to Printers in confidence that it will meet with a hearty reception, as **AN ARTICLE OF MERIT.**

N. C. HAWKS,

257 South Water Street, MILWAUKEE, Wis.

WILLY WALLACH,

No. 43 John Street,

New York

IMPORTER AND DEALER.

EVERY DESCRIPTION OF

Cut Cards and Card Stock,

PROGRAMMES

BALL CARDS,

Paper and Cards for Invitations and Bills of Fare,

CORDS AND TASSELS FOR PROGRAMMES.

WEDDING STATIONERY,

Fancy Articles for Cotillons and the German,

Stationers' Goods of Every Description.

FRANKLIN

TYPE FOUNDRY AND PRINTERS' GENERAL

BRANCH OF THE JOHNSON FOUNDRY.

Furnishing Warehouse.

ALLISON, SMITH & JOHNSON,

168 Vine Street, Cincinnati,

Manufacturers of, and Dealers in,

PLAIN AND ORNAMENTAL

TYPES

PRESSES, CABINETS,

— AND —

PRINTERS' MATERIALS OF EVERY DESCRIPTION.

Complete Printing Offices,

Of any size, furnished on short notice.

Type furnished from any Foundry in the country.

STEREOTYPING AND ELECTROTYPING IN ALL BRANCHES.

Wood Engraving and Pattern Letters.

With Good Rollers one can do Good Work on any press, but with Poor Rollers good presses and materials avail nothing.

VAN BIBBER & CO.

MANUFACTURERS OF

PRINTERS'

Roller Composition,

89 WEST SIXTH ST.

CINCINNATI.

Any kind of Rollers cast to order and sent boxed to any part of the country.
For prices, testimonials, etc. see circulars.

ROLLERS FOR SALE BY

CINCINNATI TYPE FOUNDRY CO.
201 Vine Street, Cincinnati;

THE REPUBLIC PRINTING CO.
Springfield, Ohio;

GEORGE H. VINTEN,
137 Poydras St. New Orleans;

ROBERT ROWELL,
106 Jefferson St. Louisville;

AND DEALERS IN PRINTERS' MATERIALS GENERALLY.

McKAY & CULLIN,

Particular attention given to

ELECTROTYPING

Books, Music, Patent Medicine Labels,
Wood Cuts, Advertisements, etc.

SATISFACTION

Electrotype Foundery,

GUARANTEED

SPECIAL NOTICE!
TO
Publishers, Country Printers, and Others.

We have the resources of a first-class printing office by which we are enabled to set up in the Latest Styles of Type, and Electrotype any kind of jobs, and forward them, to any distance, at the most reasonable price.

Samples of our Electrotyping on pages 107 and 157 of this book.

203 VINE STREET, CINCINNATI.

All Work

Warranted

DESIGNED BY MORT. A. READ, "THE NEAT PRINTER," CINCINNATI.

This page was worked from plates electrotyped by McKay & Cullin, on a Half Medium Globe Press.

Established A. D. 1845.

DAVID A. JAMES & CO.

Manufacturers of

FIRST-CLASS

PRINTERS' GLUES

FOR MAKING

Composition Rollers

FOR HAND OR POWER PRESSES.

Manufactory, Ludlow Avenue, Cumminsville,

P. O. BOX 525,

CINCINNATI, OHIO.

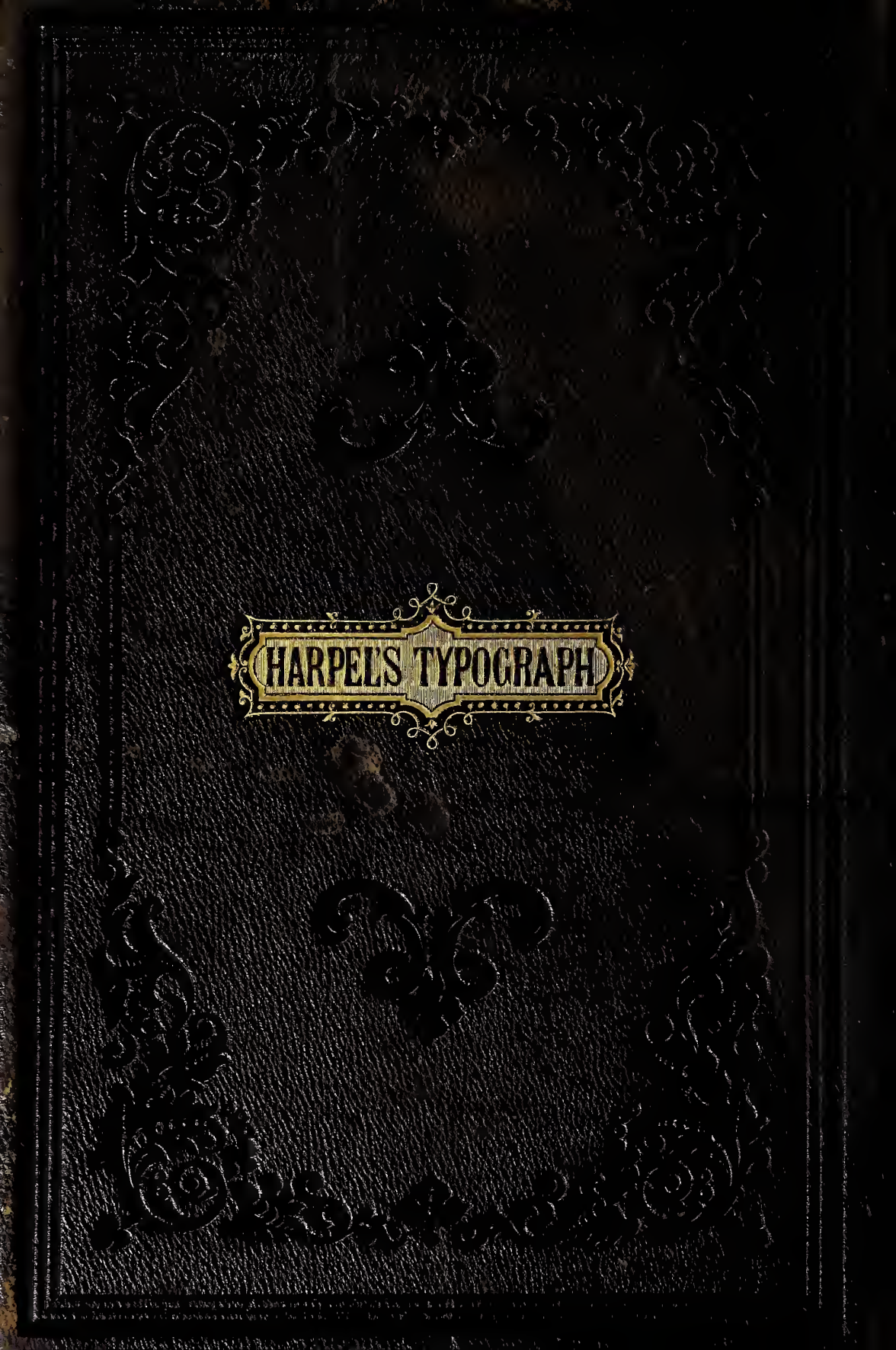
DIRECTIONS FOR MAKING ROLLERS WITH OUR GLUES:

Steep say ten lbs. of the glue in rain or other SOFT water until it becomes moderately pliant, but not too soft; then place it on a draining board or in a coarse seive until entirely free of surface drops; then place it in the boiling kettle and melt it well over an ordinarily brisk fire or by steam. This will take about fifteen to twenty-five minutes. The best sugar-house syrup should now be added in the proportion of a quart to a pound of glue, for cold weather rollers, reducing the quantity of syrup as the weather becomes warmer. Boil for about half an hour longer, or less time if it shall be found sufficient. Stir the composition frequently while boiling, and skim off any dross or impurities that may rise to the top.

It is well to test the condition of the boiling mass occasionally. Do this by letting a few drops fall on a plate or board. When a proper combination is formed the composition will be compact, elastic, tough, and smooth, having no raw stickiness when cool. Overboiling composition is apt to make it short and crumbling.

Persons who desire to use glycerin in connection with our glue may do so by deducting half as much of the latter as they add of the former. Glycerin should be added to the composition only a few minutes previous to pouring off. Pour slowly.

C. O. D. Orders from a distance promptly filled at our lowest rates.


HARPEL'S TYPOGRAPH